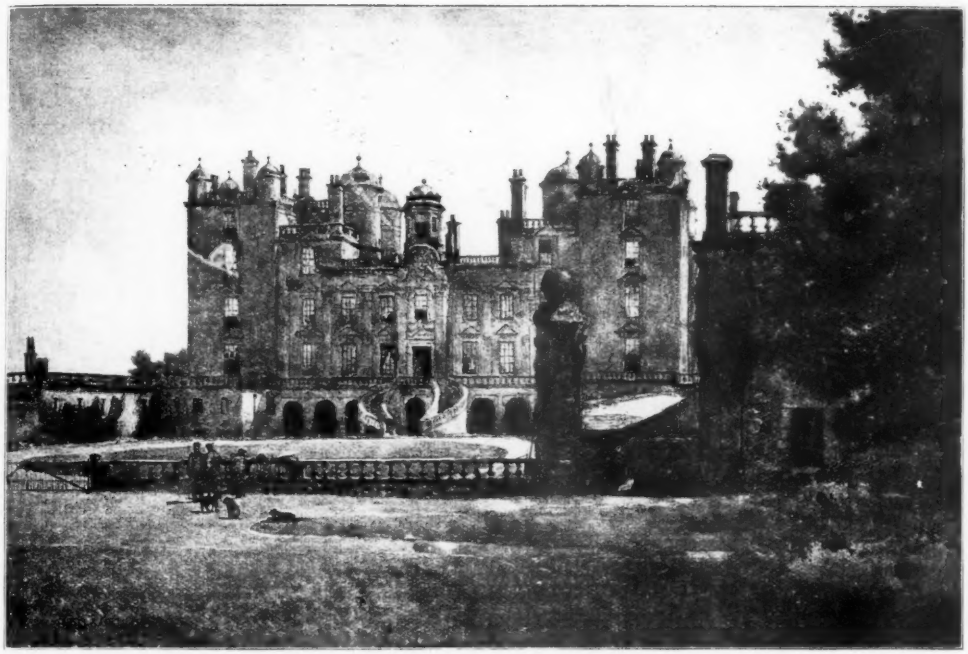

DRUMLANRIG CASTLE.

SCOTTISH ARCHITECTURE FROM THE FIFTEENTH TO THE SEVENTEENTH CENTURY,

WITH SPECIAL REFERENCE TO THE FRENCH INFLUENCE THEREON.

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Illustrated with sketches by the Author and photographs by Mr. John Fleming, Glasgow.

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THE history, character, and temperament of a people are reflected in its architecture more vividly perhaps than by any other manifestation of national spirit, except, when thoroughly understood, by its language. That being so, the sturdy independence of Scotland as a nation and people in relation to its neighbour south of the border, and its close connection, social and political, during many centuries with France, are vital factors which we might confidently expect to have produced, first, a strongly marked national style in Scottish architecture, and, second, a manifest French accent in the rendering of it, under the influence of that country so much more settled, richer, and further advanced in the Arts.

Our thesis remains true, our expectations are justified, yet the results under both heads are disappointing.

Why this should be so a closer analysis of the position, economic and historical, will show. Scotland, from the close of the fourteenth century to the beginning of the seventeenth, had a language of its own, and one with innumerable examples of the French impress upon it. If a separate language, if on words the accent, why not so with buildings? We have for one thing to reckon with an outstanding difference between language and architecture. The former is a daily, an hourly necessity for all; it costs nothing, unless maybe a mild intellectual effort. And

it, as is popularly supposed, more thought means less speech, and the Scot is notoriously parsimonious of words as of "siller"—the motto "Sen word is thral and thocht is free, keep weil thy toung I coinsell thee," carved over a seventeenth-century doorway, being delightfully characteristic in that respect; still, even for that process of excogitation so dear to our countrymen, the *word* is a necessity in the daily life alike of peace and war. Building, on the other hand, costs money, or its equivalent. Especially is this the case with those large works which are of most historical value to the investigator, for, in the nature of things, it is principally the more important examples which survive the wear and tear of the centuries. But not only is wealth essential; peace also, and a certain degree of leisure, are likewise required for their full development, together with some measure of civilisation and culture, and, last, what may be called a national entity. All these factors combined and prevailing over a considerable period may be held essential to the production of an indigenous style in architecture, and it is only towards the formation of such, or, when it is formed, as an added attribute producing a certain variation of character in the original stock, that we can rightly recognise a foreign influence.

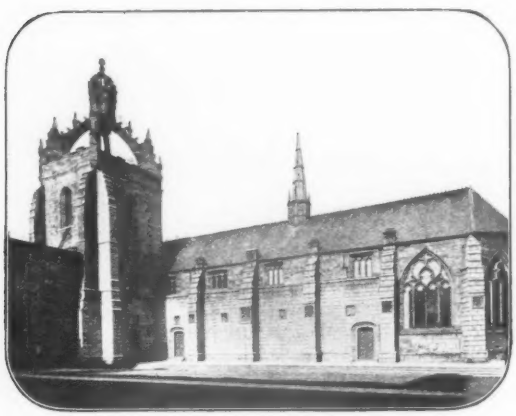


Fig. 1.—King's College Chapel, Aberdeen.

For a distinction exists, and it is important that it should be appreciated, between architecture *in* Scotland and Scottish architecture. No one, to take a self-evident example of this, would say for a moment that the work carried out by the Romans during their occupation of the country, and of which so many interesting remains have recently been laid bare, was in any sense Scottish, although the buildings were erected in Scotland. Yet the same is true in kind, if not quite to the same degree (with the exception of the Celtic work of the sixth and seventh centuries), of all the architecture which Scotland can show up to the fifteenth century, and in some degree even from that period till the Reformation. Nor is this surprising when we learn from the records of history somewhat of the political and financial experience of the country through the centuries. Bearing in mind the essential factors in the creation of an indigenous style of architecture, we find that Scotland was either wholly deficient in these, or, when endowed, endowed at cross purposes.

From the beginning of the eleventh century, when, with Duncan I. on the throne, the country was in process of being gathered together under one rule, till the end of the twelfth, there was growth towards a national entity; but for the first two of these centuries this was achieved only through constant internal strife. During the more settled years which followed from William the Lion till the death of Alexander III., or, roughly speaking, during the whole of the thirteenth century, when, according to Hill Burton, the country was more prosperous than at any subsequent period until the Union, it yet remained, as regards the mass of the people, without an approach to wealth or culture, the common folk dwelling in wood and earthen hovels, the King and nobles, in whom, apart from the Church, all wealth and power were centred, in palisaded or stone-walled enclosures of the simplest description. (The stage-setting of Macbeth by our actor-managers of to-day is very fine, no doubt, in its bravery of pillared halls, its vaults and arches, but allowance must be made for the scene-painter's imagination and the

popular demand for architecture on the stage, if not *off* it.) During even this later period also the clergy and nobles were Scottish in name only, the monasteries in close touch with and transplanted bodily or regularly recruited from the older established settlements south of the border or in France, the nobles, Saxon or Norman by birth, and holding their lands in Scotland or England, or both, by force of arms or the accident of Royal favour. While, therefore, this was a period of great building activity in Scotland, during which many cathedrals, abbeys, and castles were erected, there is no such difference between these and the works of similar nature built in England as would entitle them to be regarded as indigenous to the north. The only difference, indeed, apart from the naturally greater number and extent of the English examples, is one of time, the style of the north following that of the south at an interval of approximately half a century.

FIG. 2.

During the fourteenth century the country found itself; the national consciousness was roused and fostered through the long and heroic struggle of the War of Independence; but fighting, with the attendant devastation of the country, left neither opportunity nor means for building.

In France, too, the position was in many respects alike. During the fourteenth century she had to pass through the ordeal of the Hundred Years' War with England, La Jacquerie, the Black Death, the alienation of the Duchy of Burgundy, and the troubles in Flanders. Following on the brilliant achievement of the preceding century, French Gothic architecture was practically annihilated. Yet it was during this period, and under the stress of those political circumstances which denied to both countries for the time being any national expression in architecture, that the compact between them was closest, their mutual intercourse most frequent.

The following century assumes a better aspect from our present point of view. The nation was consolidated; the Jameses, whose period extends from the beginning of the fifteenth

century to the middle of the sixteenth, were themselves patrons of the Arts—some of them, indeed, better patrons than kings—the French alliance was continued, the intercourse between the Courts, if not the people, became still more intimate, with the resulting French marriages of James V., and now for the first time distinctive styles of architecture emerge, both ecclesiastical and domestic. These were based, of course, as all styles are, on what had gone before, but they grafted on the earlier English or Anglo-Norman work which had hitherto been the only rule, certain characteristics of the later and more purely French styles, something also, particularly as regards domestic building, from the Low Countries, yet transforming all these elements, as we shall see, and vitalising the whole with a national character and spirit, so as to produce in truth a Scottish architecture.

Fig. 8.—Melrose Abbey: East Gable.

It came when, throughout Western Europe under the influence of the Reformation, the Roman Church was already tottering, when the rearing of cathedral and monastery was turned to their sack and pillage, or, at the least, their alienation to those ignorant of their beauties and rapacious of their wealth, with the consequence that in ecclesiastical architecture the Scottish style never reached its full development. More fortunate was the domestic art, which flourished from this time, and on through the seventeenth century, to pass almost if not quite away with the interfusion of English ideas which followed on the Union of the Parliaments in 1707.

The architecture in Scotland of the earlier periods was, without doubt, at once more important and of finer accomplishment than what followed, but it does not come within the scope of this paper. Our subject-matter begins with the fifteenth century. By that time a new divergence is found in the architecture of France, England, and Scotland; the earlier developments which led up to it are familiar, and may be but glanced at in passing.

England, having seen the first Pointed style merge into the Decorated, is now following everywhere the lead of the master-builders of Gloucester Cathedral in its extension works of

1351 to 1412, and is passing from the Decorated to the Perpendicular, with its wide and flattened arches, vertical mullioned tracery in window and wall, and fan vaulting. France, originally the pioneer in these glorious early years when with logical artistry it slowly evolved from the Romanesque the soaring architecture of counterpoise in vault and buttress, has suffered a century of relapse, and is now borrowing from England in turn to produce from that country's Decorated a new and characteristic manifestation of the national spirit in its Flamboyant, sinuous and flame-like in the counter curves of arch forms and tracery. Meanwhile Scotland, cut off from her former dependence upon England by the animosity and jealousy engendered by the war, has at last also developed an architecture with a character of her own; and this she continued to employ to the extent of her modest resources till the beginning of the seventeenth century alongside of the Renaissance style, which for over a hundred years had been overspreading Western Europe from its fountain-head in Italy, and had by that time almost entirely submerged both French and English Gothic.

Fig. 4.—Tulliebole, Kinross-shire.

Even apart from lack of wealth to execute them, the time for building the great shrines of the Catholic Church had passed away. For these both faith and knowledge were lacking, and, in Scotland at least, the work was confined, apart from the restoration of earlier buildings, to a few collegiate and parish churches of moderate dimensions.

What were the characteristics of this last and most indigenous phase of the Pointed style in Scotland? Prevailing over all, the English sobriety of design in the mass carried a degree further, with a resultant bluffness, one might almost say dourness, highly characteristic of the climate and people of the north, and, at the same time, a certain elegance and grace in detail, cumbrous though it be in interpretation, essentially French. The window tracery, with one or two doubtful exceptions, is never Perpendicular, by this time in universal use south of the border, but nearly always in its essence Flamboyant. In the eastern termination of the choir, in contrast to the square end universal in England, the three-sided apse characteristic of the French "chevet" is generally adopted, and this notwithstanding the structural difficulties involved in the working out of the vaulted roof, which we can see to have greatly troubled the contemporary designers and builders. Throughout the work of this time, indeed, with a few brilliant exceptions probably by French, or French-trained master-masons, a certain amount of ignorance or, at least, inexperience of Gothic art is evident. Ethics in Reformation times and ever since have been too aptly confused with æsthetics; with the "dinging doon" of the "idols" (as the popular play of the Reformers was called in the North) was involved not only the destruction of their own cunning beauty of design and craft, but the tradition and skill by which they were produced. Yet even

inexperience, if combined with a native artistry of insight and determination to "see the thing through," at times produces beautiful and interesting results, and such are not wanting in the Scottish work of the period. Groined stone vaulting over large spaces, with the corresponding equipoise of flying buttress and pinnacle, in which lay the essence of the Pointed style of architecture, was practically unknown, but, as alternative to the timber roofs generally employed, a simple form of pointed "barrel" vault, supporting in turn an outer roof of carefully-wrought flagstones, is not infrequently used.

The buttresses are generally somewhat stunted; plain and solid—like their builders—but with rather elaborate canopies and corbels for statues placed on their fronts without recessed niches, and finished with stunted square pinnacles with crocketed finials. The arch mouldings are frequently enriched with a succession of small cusps—a characteristic feature of French fifteenth-century work.

Fig. 5.—Preston Tower.

A special character is noticeable also in the towers and spires erected at this time. The latter, somewhat squat in form, in harmony with the mass treatment referred to, are generally decorated with bands of enrichment, and more especially with a series of "lucarnes" or dormer windows, a treatment common in France and the Low Countries, and due to the influence of one or both. Again, in the open crown termination of the towers of St. Giles, Edinburgh, and King's College Chapel [fig. 1], Aberdeen (formerly also at the parish churches of Haddington and Linlithgow), we have a delightful and purely Scottish feature, based possibly on the combination of spirelets and flying buttresses in some French or Netherlandish examples, but with an outcome structural and artistic entirely original.

Many works of this period have been entirely swept away or hopelessly mutilated, one of the most complete examples—Trinity College Church, Edinburgh, which till within a generation adorned the valley between the old and new towns—having been destroyed to make way for the remorseless railway; and much of it is difficult to analyse and illustrate, owing to its having been incorporated with or superposed upon earlier work. But instances showing the special characteristics referred to may be seen in parts of Paisley Abbey, in the upper portion of the nave gable, and also in the curious corbelling-out of the passage at the triforium arcade, of which a prototype is found in Rouen Cathedral; in Bishop Lauder's work at Dunkeld Cathedral; in the choir and other parts of Iona: in the west front and spires of St. Machar's Cathedral, Aberdeen; in the churches of Rosslyn; St. Salvator, St. Andrews; Lady Kirk, Berwickshire; Whitekirk, Haddingtonshire; in St. John the Baptist, Perth. They occur in the later work of the Cathedral of St. Mungo, Glasgow, such as the spire, the upper story of the Chapter House, the Blacader Crypt or Aisle of Car Fergus, and the Screen. Yet further examples are furnished by the towers (in addition to those already mentioned) of Dundee, and, carrying the earlier tradition far past Renaissance times into the seventeenth century, of the quaint Fifeshire churches of

Anstruther, Cupar, Crail [fig. 2], and Pittenweem, together with that of the Tron, in Argyle Street, Glasgow.

It would be interesting, though quite impossible within the limits of a lecture such as this, to study these examples in detail. In one or other feature of each the French accent is evident. Nor are we left entirely to internal witness in this respect, sufficient though that be. Documentary evidence of the most interesting kind is also available. The King's "Master Mason" was a post regularly held under the Jameses, and was one on several occasions occupied by Frenchmen, while James V. had two paid functionaries of that nature, his Master Mason and his French Master Mason. Of such was the family of Merliounes, of whom Walter is indicated

FIG. 6.—ALLARDYCE, FORFARSHIRE.

by payments made as builder or designer (for it is difficult to assign the exact functions of the holder of the office in question) of St. John's, at Perth, and also of the Palace at Stirling, while close resemblance to that building in detail would lead to his being also associated with the east entrance of Linlithgow Palace.

Further, we have the two much-debated inscriptions built into the interior walls of that gem of Scottish architecture, Melrose Abbey. The first and earlier, carved on and about the lintel of the small doorway which gives access to the turret staircase, runs as follows:—

So gays the cumpas evyn about,
So trouth and laute du but duite,
Behald to ye hende q Johne Morvo.

or, as paraphrased in the modern: "As the compass goes round true and loyal to the centre, so, without doubt, truth and loyalty shall be maintained steadfastly. Have regard to the end in all things, quoth John Morvo."

The later inscription with which we are more immediately concerned is carved on a small panel let into the wall over, and reads :—

John Morow sum tym callit was I
And born in Parysse certanly
And had in Kepyng al Masoun werk
Of Santandroys ye hye Kirk
Of Glasgw Melros and Paslay
Of Nyddysdayll and of Galway
I pray to God and Mari bath
And sweet S. John kep this haly
Kyrk frae Skaith.

Around these two inscriptions Mr. P. McGregor Chalmers, the well-known church architect and archæologist, has written an interesting little book, entitled "A Scots Mediæval Architect." With much research and considerable ingenuity he endeavours to trace the work of John Morow the younger (the other inscription he ascribes to a grandfather of the same name) in the various buildings and districts referred to, and all executed towards the very end of the fifteenth century. The work of the "Paris-born" master in question is of a specially spirited and beautiful character, much superior both in design and execution to that in most contemporary buildings throughout Scotland. In some cases, as in the church work in Galloway and St. Andrews of his time, Mr. Chalmers can find, unfortunately, no trace of such a master hand, and can only fall back on the presumption, like the prophet Elijah hurling sarcasms at Baal, that there John Morow also "either is talking or he is pursuing or he is in a journey," and had left the work which he *ought* to have done to "an inferior hand."

Fig. 7.—Amisfield.

In Glasgow Cathedral Mr. Chalmers finds Morow's work in the beautiful rood-screen, the completion of the earlier, but till then unroofed, aisle of Car Fergus, now known as Bishop Blacader's Crypt, with its magnificent groined vaulting, together with that of the aisles of choir and nave; at Paisley Abbey the great works carried out by Abbot George Schaw after his election in 1472, of which there remain only to-day two carved and inscribed panels from the "wall of aisler work" about a mile in circuit round his park for fallow deer. In Nithsdale the notable resemblance of the remains of the rood-screen in Lincluden Abbey to that in Glasgow provides

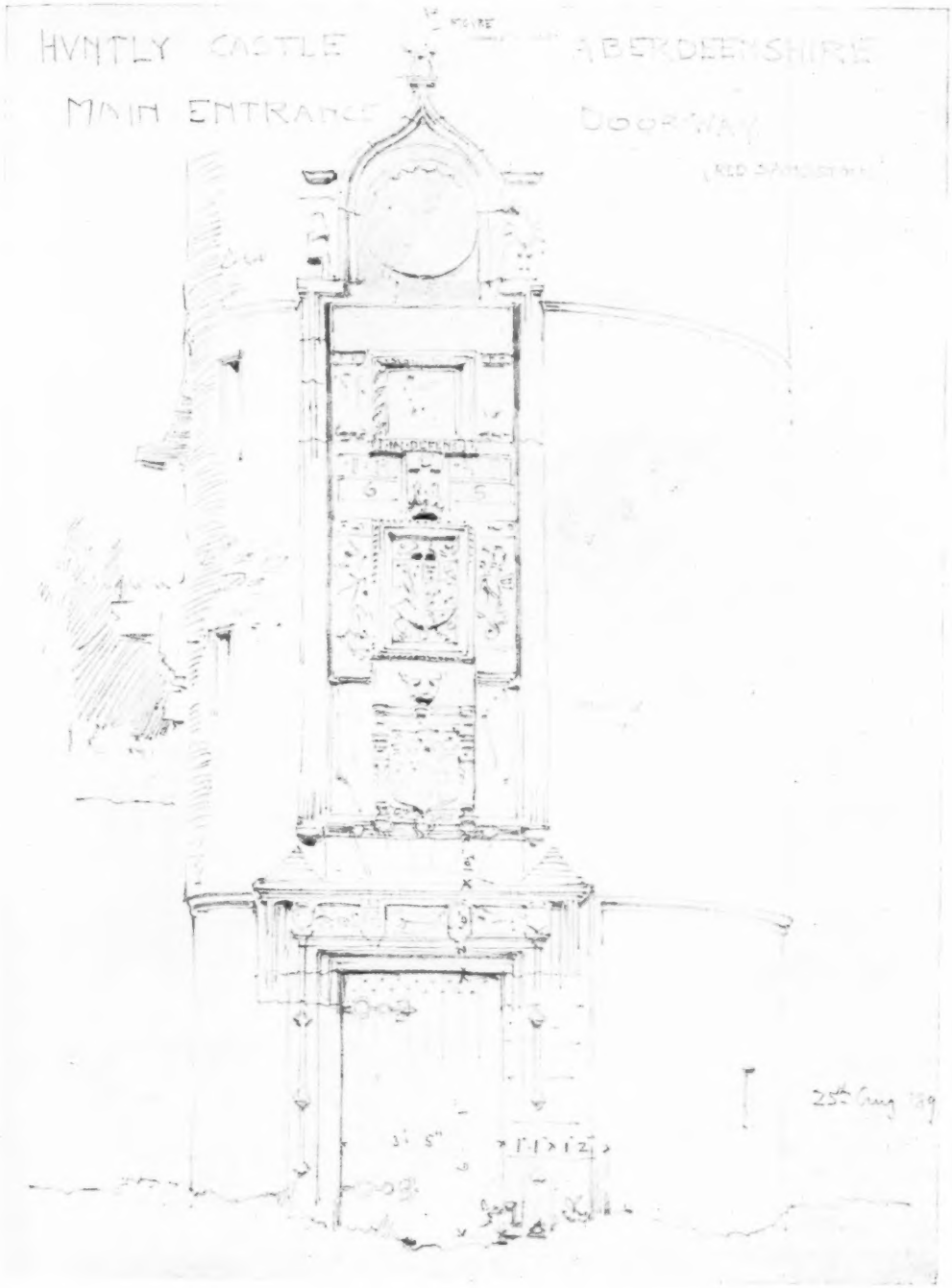


FIG. 8.

a ready clue to Morow's work there, but it is in Melrose itself that his finest achievements are to be found. There the same hand is thought to be traceable in the south transept doorway, inserted after the wall was built, with alterations made at St. John's Chapel by the insertion of new windows, and most conspicuously in the east end of the Abbey [fig. 3] and east walls of the transept carried out in or shortly after 1503. In these the marriage of James IV. with Margaret of England is supposed to be commemorated by the figures of the King and his Consort in the upper part of the beautiful gable, and, as a compliment to the lady's birth country, in

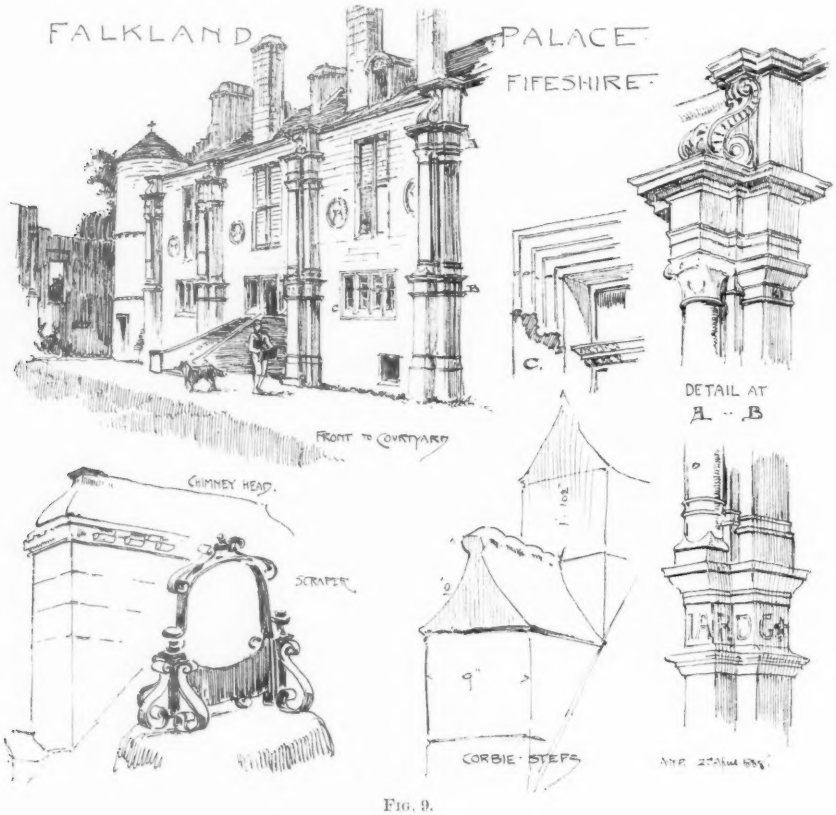


FIG. 9.

the adoption of the English Perpendicular tracery, though with highly interesting and original variations on the type.

Not less interesting to us in its indication of French influence, though of rather earlier date (and ascribed by Mr. Chalmers without any very apparent evidence to Morvo or Morow the elder), is the beautiful south wall of the nave, with its richly crocketed buttresses and window tracery of Flamboyant character.

Scottish ecclesiastical architecture may be said to have reached its climax in this work at Melrose of the early sixteenth century, but the declension in church building which ensued was accompanied, and in some degree compensated for, by a corresponding increase at once in the number and architectural interest of the houses, either in the shape of palace, castle, or

simple dwelling, erected at this period. The art, learned so late, of the Scottish designer and builder was not lost, but transferred to another channel.

And while the ecclesiastical work of the period we have been reviewing was, from the national point of view, but a phase of what was being done elsewhere with certain more or less marked local characteristics, it was otherwise with the architecture of the house as developed in Scotland from the fifteenth to the seventeenth century. Here we have something, in origin largely indigenous, in growth entirely so, so that when French or other foreign influences affect it, they are clearly discernible as something superadded. The type of house I refer to is probably familiar to those who have travelled in Scotland, or studied the published records of its architectural remains; let us try to envisage it. In plan, or disposition on the ground, most generally two oblongs, or a square and an oblong, set at right angles to each other so as to form a stunted L. The grey walls of stone or granite roughly dressed or "harled" (rough-cast) with lime and sand, rise abruptly from the grass to a height of two, and sometimes three, or even four, stories, shaped at the outer ends to high-pitched gables, with bluff chimneys growing from them, their steeply sloping sides from eaves to chimney base serrated with the familiar crow or corbie steps. At the outer angles of the gables, and probably in the re-entering angle of the L, circular turrets grow out from the plain wall-face beneath, their overhanging curves supported on moulded stone courses projecting each a little beyond its lower neighbour, the no less familiar corbelling. Under the upper story, also, in more or less broken lines, runs the corbel course, and from the higher wall-face thus projected the topmost row of windows breaks through the eaves in high-

FIG. 10.

peaked stone dormers, rich in quaint carving of crest, monogram, date, or pious motto. The doorway in the angle between the two wings is similarly adorned with heraldic device and pithy phrase, sententious, cautionary or intercessory, carved on and over the lintel—"The mair I stand on oppen height, the mair my faultes are to sight," or "Peace be within thy walls, and Prosperitie within thy hous." A grey-slated roof—or in the eastern counties at times one of pantiles—rises steeply above the walls, and runs in simple, unbroken lines, save where cut into by the conical tops of the turrets, from gable to gable. As a typical rendering of the picture may be taken Tulliebole, Kinross-shire [fig. 4], an excellent example of the Scottish dwelling of the seventeenth century, built at one time (1608) for domestic comfort, a projecting bartizan high over the entrance doorway the only suggestion of the lingering need for defence against attack.

Such was the type of house our Scottish forbears built for themselves, with, in the earlier examples, little variation on the main lines, while full of charming variety in detail, marking them for their very own and sealing them, as it were, to their sons, and sons' sons after them, with the good man's and his dame's initials, in contrast to our terrace houses and villas of to-day, built "ready-made" by the gross to a single pattern—and a bad one at that!—the homes, if such they may be called, but of periodic "flittings." Racy are these old dwellings of the soil from which they sprang, and of the men and women who were born and nurtured, loved and hated, lived and died, within their walls. By the nature of their thoughts and habits the roof-tree was moulded, while these by it were moulded in turn as by the mountain and the moor.

Fig. 11.

Such a type could not come into existence all at once, yet we find it spread over the whole country, from Orkney to the Solway, from St. Andrews and the Lothians to the shores of Ayr, and to Dunvegan, in far-away Skye, in the course of the comparatively brief period covered by five or six generations, and that at a time when communication and travel were limited to an extent difficult now to realise. It is entirely different from English domestic work of the same period; and while a certain superficial resemblance, particularly in the matter of turrets and corbelling, is observable between it and the architecture of the French châteaux of the time of Louis XII. and François I., so that its origin has by some been attributed to that country, the indigenous growth of the type may be understood and followed without difficulty, and the French and other foreign influences which affected its later development readily distinguished.

I have already made use of the analogy between the language and the architecture of a people. Scotland at this period was also rich in the possession of a language of its own, which is thus described by the late Dr. J. A. H. Murray: "It shared a common origin with English, and was, in fact, originally but part of the Northumbrian division of that language. After the establishment of Scottish independence in the fourteenth century, while in England it became lost except as a local dialect in the rapidly changing King's English of London, north of the Tweed and the Cheviots Northumbrian remained the language of a Court and a nation; it spread westward and northward over districts formerly occupied by British and Gaelic (or it may be Pictish) populations, from which it sustained modification, phonetic and structural; it received literary culture and especially contracted alliance with French and Latin on its own account, so as to acquire by the close of the fifteenth century distinctively and strongly marked features of its own not found in the cognate dialects of the North of England. From the close of the fourteenth to the beginning of the seventeenth century it was the vehicle of an extensive and, in many respects, brilliant literature, it was the medium of legislation and justice, and fulfilled every function of a national language. . . . Then followed the accession of James VI. to the crown of England, the transference of the seat of government to London, and the consequent disuse of the 'Scottish toung' by the Court and nobility, who found it desirable to speak the King's English, and gradually became ashamed of their Scotch."

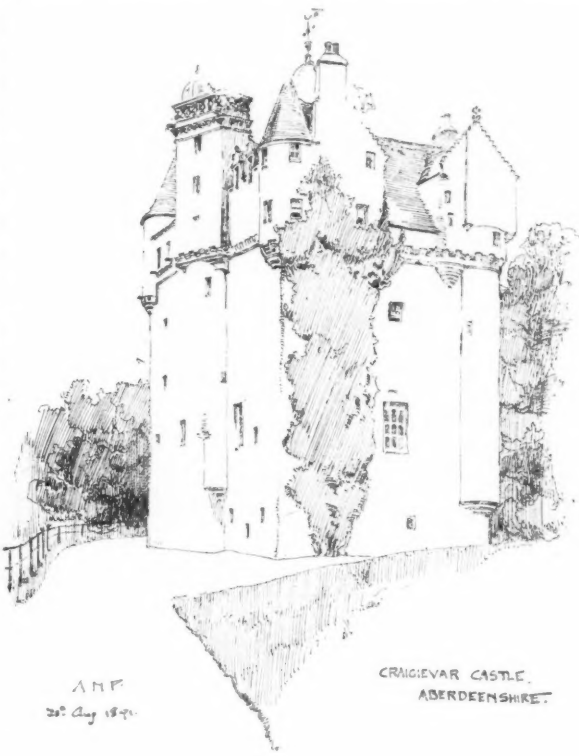


FIG. 12.

Almost word for word this passage might be used as a description of the origin and evolution of Scottish domestic architecture. In the simple square keeps known as "Peel Towers," common alike to Scotland and Northern England in the fourteenth century, we have the original vernacular; these, in sundry modifications of plan and structural detail, acquired "distinctively and strongly marked features of their own"; the alliance with French and Latin—the latter in architecture, the Renaissance influence ultimately derived from Rome—is unmistakable in the work of the later Jameses and Mary, while to these might be added (as I think with regard to the language also) the effect of close commercial relations between the East Coast towns of Scotland and the Low Countries. Finally, we have the adoption of the English tongue architecturally also after the Union, at first gradually, and except as regards "local uses and outlying districts" in the use of Elizabethan ornament, tall grouped chimney-stacks, and other

special features, but resulting before the close of the eighteenth century in the almost complete submergence of characteristics distinctively Scottish in the formal classic style of the Palladians and the personal variations thereon of the universal Adam.

Returning for a moment to earlier times, we find that by the end of the thirteenth century the Scottish kings and nobles had built themselves, like their compeers in France and England, many great castles, mighty piles within which the spirit of Feudalism would seem to be enshrined. As in ecclesiastical architecture, so in military, the earlier examples in these neighbouring countries were followed closely by the Scottish builders, though with a leaning to the French rather than to the English type in certain details. From this general prototype it might be expected that the domestic architecture of later and more settled times would take its origin in all three countries. Such, however, was not actually the case.

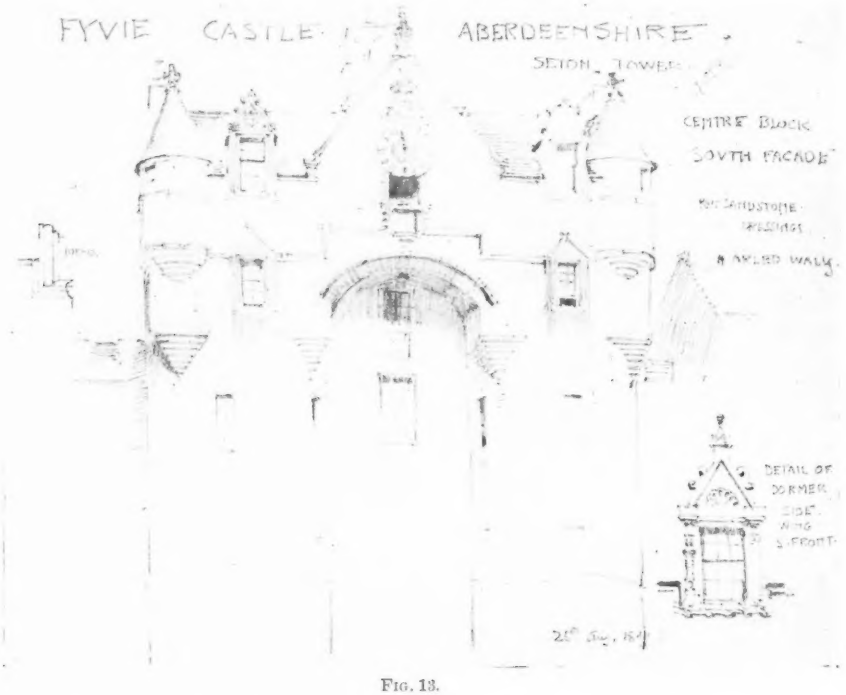


FIG. 13.

In England the great families found it more convenient by the fifteenth century to abandon as residences their fortified castles in favour of the manor houses or outlying farms to which they journeyed periodically to collect the rents in kind, thus manifesting early in their architecture the national characteristic love of home and comfort; and, in consequence, it was on these that the later English dwelling-house was modelled.

In France and Scotland, on the other hand, the fortress was the common point of departure (hence the superficial resemblance referred to), but there was a wide difference at once in the source of inspiration and the subsequent development. For in Scotland by the end of the fourteenth century the great castles had ceased to exist as a dominating influence. During the wars they were, indeed, mostly dismantled and demolished, in not a few cases by their owners themselves, owing to the discovery that they but offered strongholds for the grip of the

English on the country, and that for the hardy and mobile Scottish troops a guerilla warfare, with the mountain and moor as *points d'appui*, formed the most effective tactics.

Amid these natural fastnesses the smaller "Peel Towers" provided a home and rallying place. They were built in great numbers throughout the country, and from them there issued in direct descent the Scottish domestic style of the three succeeding centuries.

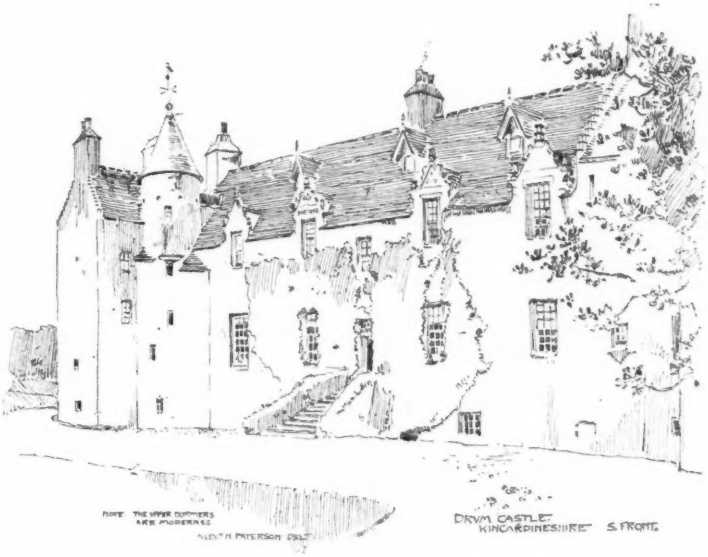


FIG. 14.

On the Peel Tower—in its simplest form a plain square or oblong building three stories in height, with entrance by an outside stair at the first-floor level, and a flat or platform roof—there were grafted certain developments arising from the growing requirements of their various owners as they progressed first in knowledge of defensive warfare, and second in ideas of civilisation and comfort.

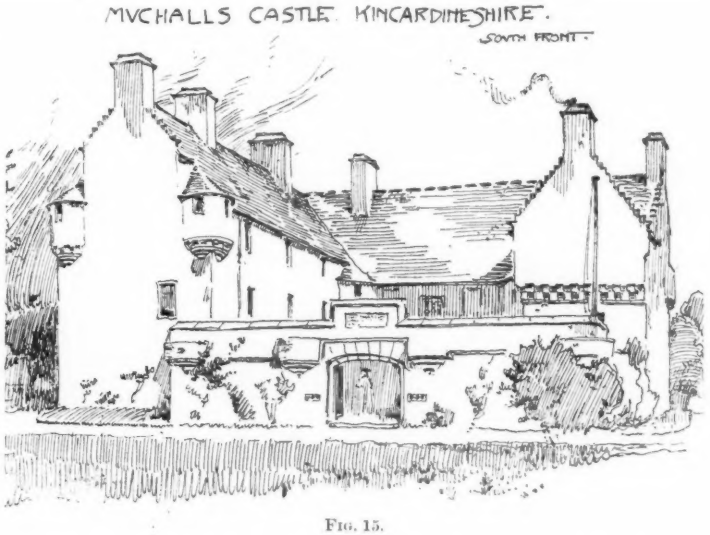


FIG. 15.

From such sprang the added salient wing, with resultant re-entering angle and L-shaped plan; the double salient or Z plan; the projected battlement carried clear of the wall by stone corbelling, with corner extensions in angle bartizans; turnpike stairs, one or more, in independent turrets, the vertical corridors of the time as opposed to our horizontal ones of today; the high-pitched and gabled roof, its side walls either carried up direct from the line of parapet or within it, to provide additional rooms, and the dormer windows to give light to these. And in Scotland, from the earliest instances and onwards, the

roof was always sloped on two sides only, for the other two the walls were carried up as gables—possibly owing to the simpler construction involved in the formation of chimney flues requiring of necessity to be raised above the roof-line. The bartizans or turrets being, from their position, left outside of the general roof-slope, were covered independently in conical or pepper-box form.

The corbie steps—though no doubt found convenient by these birds—were, needless to say, not provided for their accommodation, but were a simple constructional expedient for finishing the slope of the gables above the roof with small and easily transported stones in contrast to the longer and heavier ones required for a weather-tight finish on a smooth slope.

Such were the simple elements which composed the type of dwelling general throughout Scotland by the close of the fifteenth century. Of the earliest form of development from the Peel Tower a suggestive example may be seen in Preston Tower [fig. 5], where to the simple fifteenth century keep, already four stories high, two more, within the parapet line, have been added in the seventeenth. It remained for the national spirit during the two hundred years which followed, when increased wealth, with longer and more frequent cessations from strife, provided more incentives to build, to lay hold on these characteristics, and, with little or no reference to their origin, to reiterate, and, as it were, to play with them, using them as an artist his pigments, a musician his notes, and so producing those charming variations on the original theme seen in the many houses of all degrees of importance erected during this period. Note, for example, the wanton play with corbelling over the entrance door at Allardyce [fig. 6] or the astonishing development in skyline from the simple square of the base in Amisfield, Dumfries-shire [fig. 7]. Like grace-notes to the melody were the mouldings, the ornaments, the heraldic devices introduced with all the greater effect from their sparing use about the large and simple wall-space which they relieved.

Fig. 16.—Auchans.

The natural, simple origin and the indigenous growth may alike be seen in the almost entire independence of the Gothic or Pointed style which had hitherto been the only rule. In the earlier work of the Royal Palaces at Linlithgow, Stirling, and Falkland there is evidence of a traditional knowledge of the style in ogival and cusped arches, canopied niches, and mullioned windows, and some rude efforts to make use of the Pointed arch may be found in some of the smaller houses, as at Auchans, but in general the Scottish domestic style of this period was self-developed and self-contained.

Some of the features referred to, the conical roofed turret, the corbelled-out upper stories and dormer windows, may be found in much of the domestic architecture of Western Europe, and more especially in the French work towards the close of the fifteenth century under

Louis XII., but it is there much more purely Gothic in detail, and, given the common development in both countries from the fortress type, the independent evolution of its style by each up to a certain point is a more reasonable assumption than to attribute such remote similarity as exists to direct influence or conscious imitation.

The detail of the doorway of Huntly Castle [fig. 8], for instance, and of an endless number of less elaborate examples, is at once highly characteristic and frankly "home-grown."

While, therefore, church architecture in Scotland up to the fifteenth century was purely English or Anglo-Norman, and after that date but a Scottish variant with markedly French characteristics superadded, its domestic work, till the middle of the sixteenth century at least, was essentially indigenous, and any elements due to outside influence which appeared in it thereafter are clearly traceable as such, like a collar of foreign lace on a home-made suit of hodden grey.

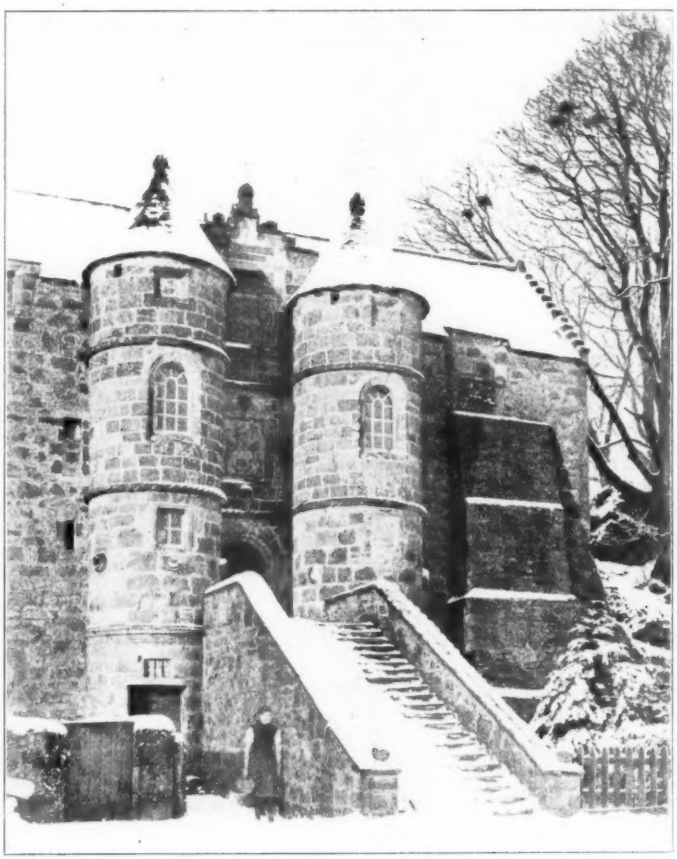


Fig. 17.—Rowallan.

It is in the work of James V. that the change first appears. His father-in-law, Francis I., the successor of Louis XII., was at once a great builder and a devoted admirer of the new Renaissance, with the result that the intermingling of the Italian revival of classic design with the late French Gothic on the castellated type as root, which, with the assistance of Primaticcio as architect, he employed on his great château of Chambord and many smaller works, has become known as the "François Premier" style. A familiar and characteristic example of this work is the small house known as the "Maison François Premier," on the Cours la Reine, at Paris, on the façade of which may be specially noted the little moulded and enriched columns between the ground-floor windows, and over these the series of bas-relief portrait busts, each within a circular frame or garland. The same motive, either with similar heads or inclosing merely the monogram of the King, or his crest, the Salamander, constantly occurs on all the work of the period. We can well understand how the young James, after returning from his visit to the French Court, and setting about to enlarge and adorn his own Palaces of Stirling

and Falkland for the fit reception of his two successive foreign brides, Madeleine and Marie of Guise, would be seized with the desire to imitate and reproduce the new fashion of building which he had seen at Loches or Blois, may be in course of execution, and in all the dazzling freshness of the white limestone; how he would seek out among the French artificers such as would enter his service to carry out in our soberer freestone the forms of this earlier "Art Nouveau," though itself but a far-away echo of old Rome.

Thus, while the south front of the Falkland of James IV. is Scottish in essence and Gothic in detail, the interior façade to the court-yard [fig. 9], added by his successor about the time of his marriage to Madeleine in 1537, shows the quaint intermingling of the new style with the old, with all the favourite François Premier motives more or less faithfully reproduced. In Stirling, with still more quaint effect, though with less skill in the use of the new and more adherence to the old style, the same interfusion is to be seen.

Fig. 18.—Pefferмill Doorway.

In Italy, and, following the lead there, in France and England, the Renaissance had been taken up with enthusiasm, and, once introduced, spread like wildfire. But the Scots' love for the old ways was not to be won over so easily, and though many important houses were being built or added to at this time and during the remainder of the century, such as Glamis, Fordell, Kellie [fig. 10], and Tulliebole, already mentioned, all within easy reach of Falkland, or Castle Frazer and its neighbours, Midmar [fig. 11] and Craigievar [fig. 12], among others in Aberdeenshire, these show little or no departure from the native style.*

Diverse alike in importance, in general scheme, and in location, further examples (out of hundreds equally cogent to the argument), such as the Seton Tower of Fyvie Castle [fig. 13], the later portion of Drum Castle [fig. 14], both in Aberdeenshire, and erected respectively in 1603 and 1619, Muchalls House, Forfarshire [fig. 15], 1619-27, Auchans [fig. 16], 1644, and Rowallan [fig. 17], Ayrshire, of about the same date in its later development, all alike show the same prevailing influence of the Scottish manner of conception, and in most cases in detail.

Not till the beginning of the seventeenth century, and then but cautiously, in the design

* The set-back to the Renaissance influence is attributed by Mr. Lawrence Weaver to the death of Stewart of Finnart, the King's master-builder or surveyor of all the Royal Palaces at this time, whom he also credits with its introduction from France. It is at best a double supposition, and the Scots' "canniness" seems to me to provide a sufficient reason, which even Finnart, had he for some time longer escaped his richly deserved fate, would have found difficulty in overcoming.—A. N. P.

of the main doorways (see, for instance, that at Peffermill [fig. 18], remarkable in its close resemblance to one within the François Premier staircase at Blois), or it may be in an isolated window to which some special importance was attached (as in the marginal note on the sketch of Kellie), was the Renaissance character introduced. Yet the first pioneers in the new movement in the home of its birth—Brunelleschi and Alberti—had finished their work and passed away nearly a century and a half before, and in Italy itself the early work of these men and their immediate followers, with its small and delicate detail, flat pilasters, and frequent enrichments, had been superseded by the larger, more truly Roman manner of Bramante, Vignola, and Palladio.

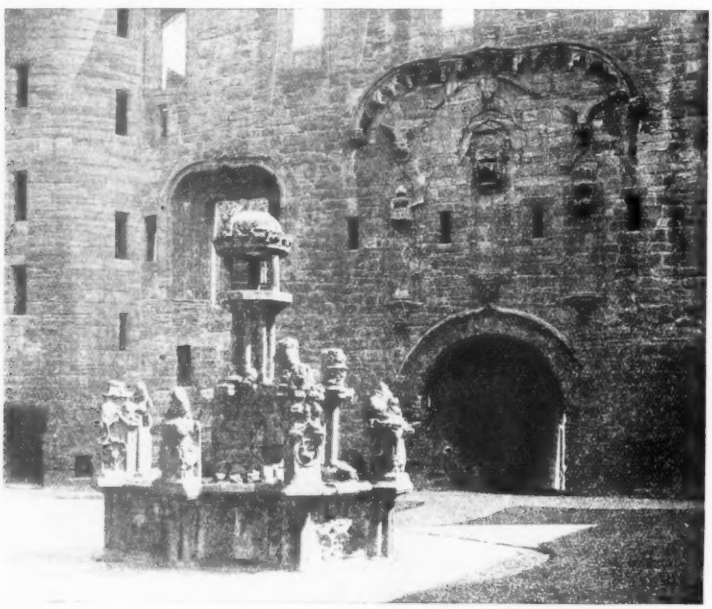
Fig. 19.—Hatton House, Ratho, Midlothianshire.

The earlier development it was that went to the making of the François Premier style, and through it, though at so long an interval both of time and sentiment, that influenced the Scottish rendering of the Renaissance when at last it became general. Meanwhile it was to Palladio and the original Roman work that in England Inigo Jones and Wren went for inspiration in their great and stately buildings of Whitehall, Greenwich, and the new St. Paul's. It thus came about that the position of architecture in this country was in the seventeenth century in many respects analogous to that occupied by it in the fifteenth. Momentous changes had intervened in politics and the arts; the Renaissance had displaced the Gothic style throughout Europe, the Union of the Crowns had brought Scotland more closely in touch with England, and furthermore removed it from France; yet, again, we find north of the Tweed and Solway an architecture, no longer ecclesiastical, but domestic and civic, entirely different from that prevailing south of the border-line, indigenous in character, but modified in detail under French influence, and, again, but more notably, with something of the Low Countries superadded.

Seen in the first half of the century in details only, such as the doorways and windows of Peffermill, Edinburgh, 1636, Argyle's Lodging, Stirling, between 1632 and 1640, and others, it spread before its close over the whole conception of the building in plan and mass, with results such as we see in Heriot's Hospital, or the old College of Glasgow, which were both erected after the mid-century was passed (and, be it noted, after the death of that pure stylist Inigo Jones), in Hatton House, Edinburgh, 1663-75 [fig. 19], and in Drumlanrig [*headpiece*, p. 233], the Duke of Buccleuch's noble seat by Thornhill, Dumfries-shire, 1676-89.

In these last two there is already evidence of an approach to the larger handling, the purer style of the English Renaissance masters, which in the North also became general in the following century, the consequent passing of the vernacular, and with it the final disappearance of the French accent; "the disuse of the 'Scottish toung' by the master masons as by the Court and nobility, and the desire to speak the King's English and growing shame of their Scotch."

While in these latter days, since the romantic revival of the national spirit by the genius of Sir Walter Scott, inspiration from the earlier indigenous style has been sought with success in much of domestic building north of the border; with this exception, from the eighteenth century to our own day the Scottish architect has followed pretty much the same tradition as his English brethren. Fortunately, as I venture to think, for the preservation of the national character, the "Scottish toung" is not easily got rid of; less so, perhaps, in architecture than in language, owing to the persistence of local material and methods of building under the stress of a more rigorous climate. National, and even more local character still reveal themselves in stone and lime, and that fortunately for the continued vitality of our art. Aberdeen, Edinburgh, and Glasgow each betrays to the observant eye a special physiognomy in its buildings, as in its inhabitants, but all three are distinguishable, and with the same difference, from Liverpool, Manchester, or London.



Linlithgow Palace: N.E. Corner of Courtyard.

CORRESPONDENCE.

The Grievances of Architects.

To the Editor, JOURNAL R.I.B.A.,—

DEAR SIR,—I venture to suggest that the coming election by the people of London, of those who are to represent them on the London County Council, should serve as an opportunity for the Metropolitan architects (and also those throughout the country) to review the present position of the Profession and of the Art and Science of Architecture in this country.

Intellectual work tends to monopolise the whole energy of those engaged in it, to the exclusion of more material matters which, nevertheless, are essential to the proper development of mind and of its power to put forth its best and maximum efforts. Consequently artists are prone to regard politics as being outside their sphere of influence and as a subject in which they have no concern, some even going so far as to think that it is improper to meddle therein.

Thus it comes about that those who desire to excel by intellect and studious development of the gifts which man shares with the gods, often fail to hold their proper place in Government, and find themselves in subjection to others who, having recognised the true nature of democratic Government, have cultivated the faculties which man has in common with the beasts that perish, and have utilised them and the cravings of nature to influence that irresponsible and ignorant part of public opinion denominated "the pendulum" to swing them into the throne of office. An election of representatives to any governing body therefore is an occasion on which the artist, as a leader of thought, should emerge from seclusion and incarnate the results of his thought in action.

Hardly a week passes without some communication reaching the Institute calling attention to the changes which are taking place in the position of those practising architecture. From these communications it appears that the work of designing buildings is slowly but surely being transformed from an occupation in which the individual is encouraged to put forth his utmost endeavour in the promotion of intellectual progress and advancement, to one in which he earns his daily bread as a mere unnamed cog in a drawing machine.

This substitution of the machine for the man is a notable tendency of the age, which in recent years has increased, and is now increasing, and which, in the best interests of mankind at large, ought to be diminished. It is the moral duty of the artist, and of the architect in particular, as the chief workman in one of the highest walks of life, to oppose this tendency. This is to some extent appreciated, but Bacon's question, "Is it not solecism to think to command the end and yet not endure the means?" is not answered, nor the advice it contains acted upon.

The means are in the hand of every citizen; but, to be effective, action must be taken. On the occasion of every election the artist must exercise his civic right and perform his moral duty in doing all that in him lies to instruct the would-be representative whom he supports, of the action the Governing Body is to take.

It is common knowledge that in the course of the next few years the London County Council contemplate expending some millions of public money in the design and construction of public buildings. The designs will probably be carried out entirely by a department of the Council, and, as far as can be seen from present arrangements, architects in private practice will have no opportunity of taking part in the work. This in itself is important, but the gravamen of the matter lies in the fact that it is characteristic of the course municipal bodies throughout the country seem more and more inclined to adopt.

It has been conclusively proved that the performance of executive work by an official whose duties are primarily and properly administrative is not for the general good. The qualities required for administration are entirely different from those essential to execution, and any attempt to combine the two functions tends to inefficiency in both. The "Executo-administrato" official more often than not, "like a man to double business bound, stands in pause, where he shall first begin, and both neglect."

The usurpation of the function of the executive designer by the permanent administrative official is a substantial grievance and an injury to the "advancement of Civil Architecture, and to those arts and sciences which it has been the practice of all enlightened nations to foster and encourage as tending greatly to promote the domestic convenience of citizens and the public improvement and embellishment of towns and cities."* Therefore it is the duty of every citizen to take such steps as he can to remove the grievance and abate the injury.

I submit for the consideration of architects that the existence of this state of affairs is to a very large extent their own fault. It is the direct consequence of neglect of their civic duties and of allowing their rights as citizens to rust unused. As leaders of thought in those matters which really concern the well-being of the nation they murmur often but seldom speak out at the proper time.

In this they do not stand alone. The deadly lethargy of the Upas Tree of Government by the Demagogue, deriving his mandate from the dregs of the population, is upon artists as upon the whole population of this country. It behoves every man who loves his country and his art, to use without flinching the lash, if need be of scorpions, to arouse men from this sleeping sickness.

* Charter William IV. to R.I.B.A., 1837.

In all countries in which the government is democratic and (whether Imperial or Domestic) carried on by Representatives of the people, each citizen has only himself to blame if he permits his representative to do acts which are contrary to the wishes of constituents or which are not for the common good. Every member of the State has a personal concern in its government, and is entitled, when candidates seek election to office or places of power, to demand from those candidates not only an expression of their views, but also a pledge that if elected they will carry out the wishes of those who place them in office—in other words, will act as constitutional Representatives, and not as despots.

Roughly speaking, there are about 7,000 practising architects in the United Kingdom, and there are in addition a very large number of persons engaged in the production of work incidental to architecture and required for improving the environment of the rising generation. At a low calculation every architect, as well as each of these producers of art work, is capable of influencing some 200 or 300 votes. If that influence were exercised as it is the duty of artists to exercise it, a political pressure could be brought to bear which neither municipal nor imperial representatives could disregard :—a leaven, comparatively small in quantity indeed, but of such a quality that it could and would affect the whole lump.

I venture to point out that a Representative Government yields to the pressure of public opinion and to nothing else. Neither registration nor any improvement in the present deplorable condition of many practitioners of architecture in this country can be expected or brought about as long as the individual fails to exert himself and to use those means for the improvement of his condition which he actually holds in his hand.

It is impossible for the Royal Institute to perform fully the functions for which it exists, as long as the individuals who compose it regard it rather as a receptacle in which to deposit complaints of well-known "grievances," instead of a great organisation in which each individual, although only an atom, forms a part and has a direct interest in and a double duty to perform towards it—to his fellow atoms and to art and progress.

If the Council and the Committees could but harden their hearts and decide more with their heads and less with their feelings, they would reply to fifty per cent. of the complaints reaching them as Hercules did to the Carter whose waggon was stuck in the mire, "Why sit and grumble? Put your own shoulder to the wheel if I am to help you."

An intelligent conformity to the laws of nature is a source, not of wrong to particular classes, but of happiness to all. The architect in asserting his right to be given the opportunity of practising his art is not claiming a favour to the injury of the rest of the community. He is utilising one means of promoting general improvement and raising the general intelligence of his race. The influence of surroundings on the young is a well-known and accepted truth. Their educational value to a very great extent emanates from the architect and is created by his work.

Therefore by bringing pressure to bear on those whom he is about to elect to govern him, and to whom he proposes to give power to take a part of the reward of his labour and expend it for the general purposes of the community, the architect as far as his public duty is concerned is performing a real service to the nation.

By demanding named mind-work in place of unnamed machine-output he is doing his duty to his neighbour, and protesting against the deprivation of a large part, and that the most valuable part, of his reward for intellectual work.

To the extent that he presses for a fair opportunity of earning a reasonable return on his capital value as represented by time-sovereigns expended in forming him into an educated man, he is only acting upon that instinct inherent in every human being to take such steps as are necessary for that self-protection which is the inalienable right of man.—I am, Sir, faithfully yours,

C. Stanley Peach [*F.*].

INTERNATIONAL TECHNICAL DICTIONARIES.

THE review of Vol. VIII. of the Deinhardt-Schlomann Technical Dictionaries in the last number of the Journal suggests some thoughts on dictionaries which deal with foreign architectural technical words and their English equivalents, and especially on the best method of making the information they contain accessible.

In the Deinhardt-Schlomann dictionaries the method which has been adopted is to divide the page into three columns ; in the centre one to give, wherever possible, a small sketch such as a wheelbarrow, a dome, a railway bridge, a steam-roller, and so on ; in the left-hand column to give the names of these various things in German, English, and French ; and in the right-hand column the names in Russian, Italian, and Spanish. Then follows an index of all the words previously mentioned, arranged alphabetically, but without any reference to differences of language except that Russian, which uses characters peculiar to itself, necessarily has a separate index.

To explain the way of using these dictionaries, let us suppose one wants to know the French for "attic." First, one turns to the index, and there, sandwiched between "Attendant of a pile driver," and "Attitudine di modellamento del calcestruzzo," one finds the word "Attic" and a reference, 129, 6. One then turns up this reference and finds a small drawing of a section through a roof,

and the information that the French equivalent of the English "Attic" is *Plancher* (m.) *de camble*.

In the compilation of the eleven volumes so far published of this series of dictionaries an immense amount of labour has been expended, and, undoubtedly, the information contained in them is very considerable; but whether that information is as easily accessible to English readers as it might be, is, I venture to think, very much open to question. I do not pretend that my knowledge of Foreign-English dictionaries which deal with architectural technical words is specially extensive, but, as far as it goes, it appears to me that a fault common to many of them is that they attempt too much, and in the Deinhardt-Schlomann series that fault is particularly noticeable.

When, in the course of reading some book on architecture written in French, one meets with an unfamiliar technical word or expression, what one needs is a dictionary where the English equivalent of this word or expression can be found at once and without difficulty; therefore, for the English architect reading French, the ideal dictionary would confine itself solely to French technical architectural words and phrases with their English equivalents, and would have no concern whatever with any other languages, nor with words used in any other arts or trades. Similarly, for the English architect reading German, the ideal dictionary would confine itself solely to German technical architectural words and phrases with their English equivalents, and with nothing else; and so on for other languages.

For the most part, however, compilers of dictionaries do not appear to realise this. They seem to think that if it is necessary for us to look up a French technical word, we shall not be satisfied simply with its meaning in English, but that we must be told as well what it is in German, and Russian, and Italian, and Spanish, as in the Deinhardt-Schlomann dictionaries; or else, if they reduce the number of languages, they more or less hide the purely architectural words and meanings among a mass of words and meanings belonging to all sorts of arts and sciences and trades and businesses.

Let me give an example. Suppose one should wish to know what Viollet-le-Duc meant by *appareil* when he wrote "l'examen de l'appareil conduit souvent à reconnaître l'âge d'une construction," and should consult Tolhausen's Dictionary. There he will find five closely printed columns containing, if I have counted correctly, no less than one hundred and one different entries devoted to English meanings of this one word, alone and in various combinations, beginning with "Appareil" meaning "Apparatus," and ending with "Appareil de Woulf," meaning Woulf's apparatus; and somewhere in these five columns and among these hundred and one different entries the particular meaning he is in search of is doubtless buried; but why should he be called upon to disinter it from such a mass of, to him, totally useless information?

While, however, some dictionaries make the mistake of giving us considerably more than we want, others fail by not giving us as much as they ought. Of this also I will give an illustration. In a description of Mont St. Michel I read "De cette porte on monte aux chemins de ronde par un escalier." Now suppose I am not quite sure of the meaning of the expression "Chemin de ronde," and I consult Berty's "Vocabulaire Archéologique," there I shall find that the English equivalent is "*alura*." This, no doubt, is exactly correct, although I believe the more usual spelling is *alure*, and not *alura*; but then the question arises: What is an *alure*? And I venture to think that it is not everyone who could give off-hand the correct answer. In such a case as this I think a few words of description might well be added.

Of course it might be objected that the addition of occasional descriptive definitions would add considerably to the bulk of the dictionary, but this might be balanced to some extent by the omission of all unnecessary words. For instance, in Mothes' Dictionary we are informed that the English equivalents for the French "Aile" are *aile*, *aisle*, *isle*, and *ile*, and for "Beffroi" *belfry*, *belfrey*, *befrey*, *baufrey*, *berfry*, *keep-tower*, and *berfredus*. From these two entries alone eight words might be dropped not only without loss, but with advantage, and if all such unnecessary words were deleted many short descriptive definitions could be inserted without appreciably increasing the size of the dictionary.

A third fault found in many Foreign-English technical dictionaries still remains to be noticed, and that is the strange, and sometimes un-English words and expressions often to be found in the English parts. If necessary I could give many examples, but two or three will be sufficient to explain my meaning. "Arbalète à liernes": *Main couple of a purlin poop*. "Chapiteau galbé": *The row-hewn capital*. "Chapiteau à crochets": *Capital with crumbled leares*. "Abouter": *To prolongate a piece of timber, to eke*. "Blocailles": *Expletives*. Such things, no doubt, are amusing, but one does not consult a technical dictionary for amusement but for precise information, and that information, as I have said before, ought to be easily and immediately accessible.

Having now pointed out what I conceive to be the three principal faults in such Foreign-English technical dictionaries as I am acquainted with, I will offer, in conclusion, the following suggestions as a means of remedying them: Firstly, that only one foreign language should be dealt with at a time; secondly, that the dictionary should confine itself solely to words and expressions relating to architecture; thirdly, that short descriptive definitions should be added where necessary; and lastly, that

the dictionary, if not compiled, should at least be very carefully revised, by English architects thoroughly familiar with the technicalities of their profession.

Birmingham. BENJAMIN WALKER [*A.*].

THE LATE W. G. B. LEWIS [*F.*].

A Reminiscence.

FEW of us whose recollection carries us back to the office of the late Mr. Wm. Burges, can fail to hold in remembrance one who for several years worked as a member of the staff at 15 Buckingham Street: William George Blackmore Lewis. It was in Burges's office, in the spring of 1874, that Lewis and I first met. By rights he should have got in there before me, but as things fell out I forestalled him by a week.

It happened that two or three extra draughtsmen were being engaged, expressly for the preparation of an extensive set of working-drawings for a college in America, and one more drawing-board only remained to be manned when I was admitted to my initial interview with Mr. Burges and invited to show my little job-lot of drawings, made during the previous three years of pupilage. But, it seemed, there was another man who was really expected to call, having been promised an interview, so I set about tying-up my portfolio, and was just turning to go, consoling myself as well as I could with an assurance given that I might hear further, when word came that I could begin work "on Monday." The other man, whose name turned out to be Lewis, walked into the office to begin work on the next Monday following. Somehow or other a site was found for his drawing-board near to mine, and we came to be reckoned as contemporaries. Presently, on some changes being made, others joined us—W. F. Unsworth among them, the first man I ever met from an office I was myself destined to enter a year later, Mr. Street's. Of Mr. Burges's friends who looked in to see the work in progress one of the most notable was E. W. Godwin, whose judicious criticism of the design set one thinking.

The work we were employed on lasted some six months, and then, as fully expected, our little company broke up. Under such a manager as John Starling Chapple we had learnt what it was to work while we were at it, and to work together; unnecessary talking in the office was put down, and equally close notice was taken of the minute for our leaving and the minute of our arriving each day. No distinctions were made of grade amongst us, each labourer being accounted worthy of the same hire was paid for his work precisely the same number of shillings per week—luckily for me, for I was probably the youngest there.

The set of college drawings being finished, those of us who had been taken on for their preparation duly received our leave of absence together—all but one, and that one was Lewis. In our hearts we others knew why this was, though we affected some surprise. We were put off with the pleasant intimation that Lewis was retained "for politeness"! We knew that he had been found out, found too good a man all round to part with lightly, a man who had proved himself one of that comparatively rare species, the architect's assistant on whom an architect can really depend. We had been assayed, and the purer metal remained.

The qualities by which Lewis had been distinguished above the rest of us in that office—such qualities as thoroughness, precision, tenacity of purpose, self-reliance, and the power of making well-sustained effort, distinguished him throughout. I appeal confidently to all who remember him to bear me out in this assertion. An illustrative instance occurs to me, in connection with which it was my privilege, in after years, to be reminded of these particular qualities in my friend. We had undertaken to make a survey together of a certain property, some twelve acres in extent, comprising engineering shops and offices, yards, stabling and meadow-land bordered by a winding river; some old boundaries also were to be defined, although for long buried deeply under made-ground. We had to do the work during the months of January and February; snow fell on more than one day while we were at it, and Lewis insisted on our reading dimensions, on the foot-chain, to half an inch. Of course he did the drawing-out to scale; the thing had to be right.

Now, in the same inclement season, comes the sad tidings that my old friend, while surveying down in the country last month, contracted congestion of the lungs, which led to heart failure on the 4th inst.

10*th Feb.* 1913. WALTER MILLARD [*A.*].

William George Blackmore Lewis was articled to John M. K. Hahn, serving the latter part of his time in the office of Edmund Woodthorpe [*F.*], Mr. Hahn's brother-in-law. From 1874–80 he was assistant in the office of William Burges, A.R.A., from 1880–82 in the office of Alfred Waterhouse, R.A., and was afterwards for several years chief assistant to Mr. Frank Baggallay [*F.*]. In 1878 he won the Grissell Gold Medal for drawings illustrating his ideas for the Design and Construction of two bays of a Groined Cloister, date thirteenth century. In 1882 he was awarded the Royal Academy English Travelling Studentship in Architecture. He was for several years editor of the *A.A. Sketch-book* and instructor in the A.A. Studio. The Institute is indebted to him for some of the motto head-pieces still occasionally used in the JOURNAL, and he contributed sundry illustrations of helmets, mail, &c., to the *Archæological Journal*. He started in independent practice in 1886, and was elected Fellow of the Institute in 1906.

REVIEWS.

SHROPSHIRE CHURCHES.

An Architectural Account of the Churches of Shropshire. Part 10. *By the Rev. D. H. S. Cranage, M.A., F.S.A. Illustrated with permanent plates from photographs by Martin J. Harding. With ground plans by W. Arthur Webb* [*A.*]. 4*o.* 1912. [*Hobson & Co., Wellington, Shropshire.*]

This final instalment of Mr. Cranage's comprehensive work contains much that is interesting and valuable, and brings the second volume to a conclusion with the section on the Liberties of Shrewsbury and an Appendix of considerable importance, besides an illuminating General Survey and a Retrospect, in which the author refers to his chief sources of information and acknowledges help he has received from various persons during his eighteen years' fruitful labour. These, with a very full index, bring to its close a work that will be increasingly useful as time goes on.

The fact that all the churches, both old and new, are described, with a full account of the various features of each, gives a completeness that is satisfying, and will make Mr. Cranage's book a standard work of reference, that students may turn to without disappointment. The clear distinction made between old work and that which is more recent will, in time to come, be most valuable, especially as regards those churches which have been restored with a precise archæological correctness. In former times each church told its own tale, for every alteration and extension bore the stamp of the period when it was made, and one could trace the evolution of its history from an examination of the fabric; but this is not so now that our architects are imbued with a more academic spirit, and sometimes make their work of restoration so exactly like what has been done before, that a spurious antique is produced, which the weathering of time makes indistinguishable from a genuine relic of the ancient days. This consideration will make the value of Mr. Cranage's analyses readily apparent, and we foresee that, as the years progress, references to them will be more frequent and they will have a growing utility.

Mr. Cranage rather apologises for illustrating St. Chad's (new) Church, because it is a classical building erected as late as about 1790. This seems to us to be needless, and we think a ground plan also might have been given. It is very unusual and is laid down on grand lines. In Plate cxi. we see how happily, and with what dignified effect, the classical style of architecture can be adapted to ecclesiastical purposes. It is not always realised what an excellent foil classical fittings are to the Gothic; the full descriptions of those given in Mr. Cranage's work show that he has a proper appreciation of such matters. The chapter on St. Mary's, Shrewsbury, is a model of its kind, and the reasoned working-out of the several dates is quite convincing.

We are not in love with the fanciful initial letters, and the general get-up of the book lacks artistic perception. This may be due to the conditions of publication, and possibly Mr. Cranage would improve on it if he were now beginning to publish. However, the extension over a long period of the issue of a work of this character has definite advantages, as is shown by the long Appendix, which is largely devoted to additional matter that has come to light since the earlier parts were written, and the amplification of details connected with the various churches already described in their proper sequence. The General Survey is an admirable summary of the whole subject, not the least interesting part being the unprejudiced review of works done since the Gothic Revival. The value of the tabulated list of fittings and church furniture can hardly be over-estimated, while a stimulus to the fascinating study of the so-called "Low Side Window" is given by the complete list and full description of every example in Shropshire.

Grateful recognition is also due to Mr. W. Arthur Webb, whose carefully drawn plans help us to a more complete understanding of Mr. Cranage's descriptions, which are made thoroughly clear and explicit by these admirable illustrations. We would, however, point out that the joints of construction are insufficiently shown in certain sectional details that are given, as in fig. 76. The same remark applies to fig. 74.

The reading of this exhaustive study of the architectural history of Shropshire churches must be a rare pleasure to any one with antiquarian sympathies, and Mr. Cranage is to be congratulated on the completion of a monumental work which is not likely to be superseded.

Leicester. S. Perkins Pick [*F.*].

GOTHIC ARCHITECTURE AT OXFORD.

The Story of Architecture in Oxford Stone. By E. H. Greening Lamborn. 8*o. Lond.* 1912. 3*s.* 6*d. net.* [*Henry Frowde, Amen Corner, E.C.*]

It is only within recent years that students of Gothic art have been able to free themselves from the influence of the Ruskin-Rickman school, and to look at the art not as an agglomeration of interesting details, but to take a comprehensive view of the steady evolution of the style, to overcome the natural appeal of the craftsman's handiwork, and consider the large problems of construction which faced the builders of the Middle Ages.

The book under review, though inevitably something of a *réchauffé*, makes a worthy attempt to set forth the progressive theme of evolution in the art, due to these large problems. It sets out, indeed, to consider the whole history of development in architecture from earliest times with illustrations from Oxford, but it really develops into an analysis of "a new system, the last and noblest, Gothic architecture."

After a short introduction, the author proceeds

to sketch the development of architectural construction through the trabeated forms to the introduction of the arch. This leads to the consideration of arcuated Romanesque building, and thus to the final examination of Gothic design.

The author shows in a very clear way the progress of Gothic problems of construction, and the scientific manner in which those constructive solutions were beautified, and he has grasped the fact that Gothic architectural problems were primarily structural and economic, and secondarily artistic; that the great need for economy in construction forced the art of the builders to take a second place, so that "the artistic beauties of the style belong to its early stages, its architectural triumphs to its later years."

The history of general development is followed by a well-written "Conclusion," a public-spirited appeal to the layman to take architecture seriously, and a healthy attack on the plagiarism and the untruth of the modern builder.

The second and larger part of the book is occupied by an excellent study of the elements of Gothic construction and ornament, under the title "A Grammar of Architecture." The chapters on the "Window" and the "Roof," showing the development of these features from their early beginnings, are especially noteworthy. There is also a short and interesting chapter on "Armory in Architecture," a useful branch of knowledge in a study of Gothic work, and one in which the author is evidently well versed.

Little mention is made of the Gothic timber-roof so well developed in English work, this feature being regarded in the book rather in the light of a makeshift.

But slight allusion is made to Renaissance building, partly owing, no doubt, to the overwhelming quantity of good mediæval work in the city, but more probably to the author's evident affection for the "glorious Gothic style." Upholders of the Georgian cult and the neo-Grec mania will scarcely agree with Mr. Lamborn's contention that "now, after three centuries of arrogant and ugly buildings, we are beginning again where the Elizabethans left off." On the other hand, his somewhat rigid ideas on the subject of beauty as exemplified by sane construction are healthy, though one rather regrets his distaste for flamboyant tracery, so beautifully and suitably developed in France.

The author's occasional light touches of humour make the reading of the book a pleasure. He seems to take a delight in exploding fanciful theories. On much of the belief in symbolism in Gothic architecture he casts grave doubt; that the carved oak leaves, for instance, on St. Frideswide's shrine were intended to suggest her sojourn among the acorn-eating pigs he considers as purely a myth, and of course he holds that the sixteenth-century E-shaped plan bears no compliment to the "Virgin Queen."

A short account of the local materials such as the Headington limestone would have proved useful to the architect, but the book will appeal more readily to the amateur. It should, nevertheless, be valuable to any one intending to study the buildings of Oxford, and if ever a faculty of architecture becomes an accomplished fact at Oxford University—it should surely be hoped that it will—this work will form a most useful handbook for the undergraduate, being conceived on good lines and amply illustrated.

W. J. Roberts, M.A. [*A.*].

CLIENT AND ARCHITECT.

Keystones of Building. By F. Inigo Thomas. Sm. 8o. Lond. 1912. 2*s.* 6*d. net.* [*John Lane.*]

The title of this little book may at first sight seem misleading, in that it is concerned not so much with the practical details of building, as with the relations between client and architect, and the difficulties of the same. The book is addressed to the client, and in a very clear fashion takes him, or her, as the case may be, through the various stages of a building operation. If it gains that measure of attention to which it is entitled, and if clients will act according to its precepts, then will the task of many an architect be simplified—and there is no better keystone of building than sympathy between the two. It is hardly necessary in the Journal to note the side of the book concerned with the various stages of a building operation. That difficulties exist must be admitted, and it can hardly be otherwise in a profession that is so "open" as to comprise within its members men who proudly proclaim themselves artists, and distinctly superior ones at that; other gentlemen, who pursue the lucrative calling of the expert witness with a distinct leaning to surveying and dilapidations; and a certain underworld who combine money-lending with building. It would appear that before it can be expected that the client will unhesitatingly accept his architect's opinion with the same docility, shall it be said, that he accords to his lawyer's or doctor's, that a line must be drawn between quack and professional, and assurance given of a certain minimum standard of qualification. When the client can safely depend on the same average of efficiency in the architect that he now obtains from the doctor, difficulties will be less heard of. At the moment he meets the architect who is in reality an artist rubbing shoulders with another who is not. Small wonder that he is confused and should sometimes mete out to the artist the treatment that is the due of the other. Mr. Thomas's book will help matters forward if it leads to a clearer appreciation of the differences between the two types.

C. H. B. Quennell [*F.*].

INDIAN ANCIENT MONUMENTS.

Archæological Survey of India.—Annual Report 1907–8. *La.* 4*o.* 1911. *Price* 37*s.* 6*d.* [*Calcutta: Superintendent Government Press.*]

This report is presented in a handsome imperial quarto volume of 360 pages, illustrated by 86 photographs and 267 text illustrations. The actual cost of the survey (assuming the rupee to be equal to 1*s.* 4*d.* in value) is as follows:

Value of work done . . .	£25,782
Cost of establishments	13,451
Cost of the Report	437
Total cost . .	£39,670

It seems that a good deal of actual work was performed by the Public Works Department, and presumably the cost of work so executed is included in the above-quoted figures.

The text is fully explanatory, and the work generally seems to have been well and conscientiously performed. The coloured plate (page 29) is to my thinking an unnecessary expense. The arabesquing is not good of its kind, and the colour too fragmentary to produce anything but a dirty effect, and there are no lines of section to indicate the parts in relief. Nearly half the scales on the drawings have the zero misplaced, an error by no means confined to Indian drawings, but inexcusable on drawings prepared under skilled supervision.

Although it is difficult to draw a line between conservation and restoration, it is gratifying to note that less money is being spent on the latter. The Director-General believes himself to be in unity with the expressed views of the Society for the Preservation of Ancient Monuments; but so long as neither this Society nor the Director draws a distinction between stone buildings and brick buildings plastered, this unity may be open to question. In my opinion no building plastered can be considered "monumental," for the simple reason that the plaster now seen is very seldom that originally applied. The Society's notes apply to *stone* buildings, but most of the buildings in Beejapure, including the Gol gombez, are plastered. The later works in Humpi, Golconda, Secunderabad, Madura, Trichinopoly, and elsewhere are also plastered, and it is folly to spend money on them unless they can be used as offices.

R. F. Chisholm [*R.F.*].

New Books.

Problems in Periclean Buildings. By G. W. Elderkin, Ph.D., Preceptor in Art and Archæology, Princeton University. 4*o.* Princeton and Lond. 1912. 7*s.* 6*d.* net. [Henry Frowde, Oxford University Press.]

Centula. St. Riquier. Eine Untersuchung zur Geschichte der Kirchlichen Baukunst in der Karolingerzeit. Von Wilhelm Effmann. 8*o.* Münster in Westf. 1912. 6 marks. [Aschendorffsche Verlagsbuchhdlg., Münster in Westf.

Erratum.—In the review of Shuffrey & Davies' *English Fireplaces* (Batsford) in the last number of the Journal, the price should have been quoted as Two Guineas net, not One Guinea.

9 Conduit Street, London, W., 22*nd February* 1913.

CHRONICLE.

The Meeting of the 3rd February.

The Papers on Modern Hospitals, read by Messrs. A. Saxon Snell [*F.*] and Wm. Milburn, jun. [*A.*], at the Institute last Monday, attracted a numerous audience, several well-known medical men connected with hospitals being among the visitors. The customary two hours proved all too short for the exceedingly full papers and the extensive series of illustrations prepared for the occasion, and as the evening drew on and an interesting discussion was in prospect, Mr. Milburn did not attempt to read his Paper but devoted himself entirely to an explanation of his illustrations. Altogether from eighty to a hundred slides were shown, illustrating plans and views of the most notable modern hospital buildings in England, France, Germany, Canada, and the United States. It is proposed to publish a considerable number of plans with the Papers in the Journal, and as the preparation of the blocks will take some time, publication has had to be postponed to the next issue. The discussion, which was contributed to by Mr. Edwin T. Hall [*F.*], Dr. Boobyer, Medical Officer of Nottingham, and Mr. Stanley Boyd, Senior Surgeon at Charing Cross Hospital, will appear as usual at the end of the Papers.

Ghent International Exhibition: Notice to Exhibitors.

We are requested by the Belgian Legation in London to announce, for the information of architects who have been invited to exhibit at the International Exhibition shortly to be opened at Ghent, that the works will be collected in the warehouses of Messrs. James Bourlet et fils, of 17 and 18 Nassau Street, W., from the 1st to the 10th March, with a view to their being despatched all together to Belgium. Exhibits must take the form of drawings on strainers and framed photographs. The cost of packing and carriage to and from the Exhibition, together with insurance against risk *en route*, will be defrayed by the Exhibition Committee. The Committee, however, will not be responsible for the insurance of works during the time they are on exhibition at Ghent.

R.I.B.A. Prizes and Studentships 1913: The Essays: Further Awards.

Acting on the recommendation of the Essays sub-committee of the Prizes and Studentships Committee the Council have awarded Certificates of Honourable Mention to the following competitors for the Royal Institute Silver Medal :—

MARTIN SHAW BRIGGS [*A.*] for an Essay on "Baroque Architecture," submitted under the motto "Chi non sa far stupir vada alla striglia."

JOHN HUBERT WORTHINGTON, M.A. [*A.*], for an Essay on "Baldassare Peruzzi of Siena," submitted under the motto "Anti-Baroque."

FREDERICK THORP, M.A., for an Essay on "The Timber Style," submitted under the motto "Durmast."

The Free Practice of Architecture in Scotland.

The following Memorial, drawn up by the Glasgow Institute of Architects in concert with the other Allied Societies in Scotland, was addressed last December to all the Scottish Members of Parliament, calling attention to what the memorialists consider to be a public injury and a serious interference with the free practice of architecture in Scotland. It is satisfactory to note that the Government has since seen fit to change its plans and to arrange for throwing open to competition the designs for the new Government Offices in Edinburgh :—

SIR,—We desire to call your attention, as the Parliamentary representative of a constituency within our provinces under the Royal Institute of British Architects, to what we consider to be at once a public injury and a serious interference with the free practice of architecture in Scotland, in the placing by the Government of the design of its building work in Scotland with H.M. Office of Public Works in Edinburgh, instead of, where possible, employing the services of outside architects.

For years this practice has been on the increase, until now the amount of work controlled by the Office is much more than can be handled with good results by its chief architect, with the result that a large proportion of it has to be delegated to irresponsible assistants, while the opportunities of private architects are correspondingly diminished.

We are not without appreciation of the great ability shown by the present holder of the office in question, but altogether apart from the question of individual skill, we are strongly of opinion that the employment of an outside architect for all but routine work is to be preferred in the public interest for the following reasons among others :—

1. All experience of departmental work of this nature shows the oncost in relation to the value of work executed to be greater, where everything is accounted for, than where done by outside men. From figures put before us we have reason to believe that in the case of Government offices doing architectural work, such oncost is considerably in excess in this respect.

2. The lack of personal responsibility on the part of the designer when an official tends to indulgence on his part in extravagance in design and finish, and this is accentuated when his experience has been confined to the work of a public office where personal interest is not closely involved in controlling expenditure. On the other hand, an independent architect, being freed from inside influences and accustomed to be held personally responsible for ultimate cost, is in a much better position to look after his clients' interests in that respect.

3. When an official architect is employed there is no second opinion as to the quality of his work. On the other hand, when an outside architect is employed, the Government still have the benefit of the advice and criticism of their official upon the work produced.

We have also to complain of the manifest injustice and hardship involved to the general body of Scottish architects who, through taxation, are under the necessity of contributing to the upkeep of a Department which occupies the position of a favoured competitor.

We address you especially at this time as we have reason to believe that, in addition to the large amount of work with which the Department is already burdened, the Government now contemplates handing over to it the important buildings to be erected on the site of the Calton Jail in Edinburgh, and we beg that you will use your influence to the end that this policy may not be adopted, but that instead, and on the abovementioned grounds, arrangements may be made for placing this work with outside architects, preferably by competition.

In making the foregoing suggestions, it might be pointed out that the system advocated has already been adopted in England, the designing of many of the more important Government buildings recently erected having been placed in the hands of outside architects, amongst which might be quoted—the War Office, the Local Government Board Offices, the British Museum, the Admiralty Offices, &c.

What makes the profession regard this particular matter with more than ordinary anxiety is that the site to be dealt with is undoubtedly of unrivalled importance, the opportunity of treating such a site probably not having occurred in the history of Edinburgh, and the treatment of any building placed upon it will call for the very highest architectural skill, which, it is considered, might be most readily secured by obtaining the various ideas of the profession at large by such means as the organising of a public competition.—We are, &c.,

On behalf of the Edinburgh Architectural Association,
A. LORNE CAMPBELL [*F.*] *President.*
JAMES KERR, *Hon. Secretary.*

On behalf of the Glasgow Institute of Architects,
ALEXANDER N. PATERSON, A.R.S.A. [*F.*], *Pres.*
C. J. MACLEAN, *Secretary.*

On behalf of the Aberdeen Society of Architects,
ARTHUR CLYNE [*F.*] *President.*
A. H. L. MACKINNON [*A.*] *Hon. Sec.*

On behalf of the Dundee Institute of Architects,
C. P. K. YOUNG [*A.*] *President.*
WILLIAM SALMOND [*Licentiate R.I.B.A.*] *Sec.*

The Architecture of the New Delhi.

The question as to the architectural treatment of the new capital of India is well and soundly argued by Mr. H. Heathcote Statham [*F.*] in the current issue of the *Fortnightly*. Mr. Statham gets straight to the point with the question, "Are we to build as Englishmen or as Orientals?"—a question to which, he considers, there can be but one rational reply.

We in India (he says) are very much in the position of the Romans in the countries which they conquered and annexed; and what their practice was we know well enough. Wherever the Roman eagles went, there arose the Roman columnar temple and the Roman triumphal arch—alike at Nimes, at Timgad, or at Baalbec. Similarly, wherever Mohammedan conquest went, its visible symbol

was the mosque in the Saracenic style; not quite so uniform as the Roman architecture in foreign lands, because the Mohammedan conquerors were more racially mixed and their type of architecture therefore not quite so distinctly defined; it took upon it something of the colour, so to speak, of the country into which it penetrated; it varied a little in Egypt, in Africa, in India, and in Spain; but the main type was always kept to. It is in the natural course of things that it should be so. A conquering nation, erecting buildings for its own use on a foreign soil, brings its own architecture with it; builds as it had been accustomed to build at home.

That was, of course, what we did in our earlier Government buildings in India; and—the critic on the other side may reply—wretched, dull, commonplace architecture it was. True; but at home it was equally so at that time. That reproach can hardly be brought against it now; not against the best of it, at all events. English architecture has advanced immensely during the last thirty years. We have been through our modern Gothic fever and got over the effects; and we seem now to have settled down towards a new phase of that form of architecture, so peculiarly suited to modern needs and modern life, which had its foundation in the Italian Renaissance, and which Fergusson not inaptly characterised as "the architecture of common sense"; we might add also, that it is emphatically the architecture of a cultivated society. The conclusion therefore would be, if there are important Government buildings to be erected at Delhi, build at Delhi as you would build in London, only—with due regard to the difference of climate. There is where the real opportunity comes in for something new in architectural design and detail. Plan, and forms of roofing, would have to be modified to meet the conditions of great heat. A bright sun would give occasion and excuse for a more delicate and refined treatment of detail, such as would be ineffective in the English climate; in fact, the Renaissance type of architecture is really more fitted to be effective under a bright sky than under a dull one. Local materials would afford new effects of texture and colour, and the presence of Oriental vegetation might very well suggest interesting and piquant variations in decorative detail, without destroying what ought to be the prevalent English character of the architecture. Such an architecture, distinguished also by that refined and carefully considered profiling of mouldings which is one of the great characteristics of a civilised architecture, and is hardly ever found in Oriental architecture, would be a far more suitable architectural expression of our position in India than could be produced by an arbitrary and self-conscious assumption of Orientalism.

Some Things to be done.

As an inducement to members to read the whole, a few extracts are appended from the admirable address entitled "Some Things to be done," delivered by Professor Lethaby [*F.*] at the Architectural Association on the 10th inst. He said:—

I should think that the first thing for students to do is to get a clear idea of the educational courses now open to them in several schools; and, further, a view of the educational ladder provided by the scheme of essays in Design which are accepted as Testimonies of Study by the Institute, reaching up to the larger prizes and the scholarships tenable at the English School in Rome.

I can only here remark on two points. First, that the Institute Examinations provide for a diversity of gifts. In studies going beyond a necessary minimum students may concentrate according to their bent on facility in design, on scientific research, or on scholarship. The hope and intention is that by thus differentiating the course much higher attainment in one or other branch will become common. What is required is not mere text-book science or scholarship, but a cultivation of some real gift until definite power is attained. The second point, and it is a small one, is to call the attention of students to the fact that the Institute Essay Medal is now given for independent essays and researches undertaken at the student's own will. But here again special original work is called for.

One need of the time—for if it is not done now it never can be—is to record so far as may be British building customs as they are still traditionally exercised: ways of stone-cutting as in East Yorkshire, where the masons dress a pretty herring-bone pattern on the face of their stones; ways of laying pantiles, of coating plaster ceilings with skim milk, and of putting tallow and salt into whitewash. Practical building wisdom of this sort should be gathered up and recorded. For this, I may point out, the country student has special advantages. Cob walling, the making of plaster floors, and "limeash" floors—are those arts still remembered? Even the folklore of building should be gathered up. In what parts of England, and why, do builders put a bush on the roof? If short notes on such subjects were sent to the Records Committee of the Royal Institute of British Architects I am sure that they would gladly collect them and from time to time print the results in the JOURNAL. A book of reference which seems to be badly needed is one on the building materials which are most characteristic of the several districts, with as many particulars as possible on local building traditions, and a few illustrations of typical examples. . . .

Another thing to be done, I would suggest, is to introduce a newer form of travelling studentship, or of travelling at one's own will. What is wanted is a free mind to observe and record valuable ideas in building and town life—the noting of pleasant ways of doing things. The ordering of museums, lighting of picture galleries, and the decoration of railway stations should be investigated. Observations should be made of the elegance of French construction in iron and steel, the German excellence in roofing and forms of external plastering, the direct and admirable Swiss way of putting lightning conductors to buildings, the general European decision as to the proper colour to paint constructive ironwork. All are worthy of imitation. Concrete bridges, cages elevated on tall lattice standards for gathering telegraph wires together in an orderly manner, even telegraph posts themselves painted in smart ways, are interesting. Ideas for the desired cheap cottage might be gained from the Swiss chalet, with its roof at a pitch of 120 degrees, containing no lost space and jutting far so as to keep the walls dry. In Switzerland, too, they have learnt how to lay cement pavements without their cracking, and much use is being made in cheap building of cement tiles not hideous in colour, also cement drain-pipes and troughs. . . .

. . . . We have to make a fine tradition of dealing with the most modern forms of construction in steel and concrete. . . . It must be admitted that, notwithstanding its virtues, concrete has certain special defects. Such, for instance, are poor surface and colour and the tendency to crack. The least cracking seems to destroy our pleasure in a fabric which should be continuous as a china vase. Again, concrete construction seems to call—I may be mistaken—for a large supply of commonest labour, a society of navvies organised by gangers. So far as this is necessarily the case concrete structures can never, I think—however high their functions may be or however perfect their forms—become a noble type of architecture. For I must repeat again and again, a fine architecture is not

a question of shapes, but of the quality of the effort that has gone into it over a long space of time. Every phase of art is, so to say, the logic of a principle.

Still, even if concrete construction does depend on essentially slave labour, we must do the best we can while continuing to use it.

As a starting-point it may be well to compare the special characteristics of concrete construction with those of masonry. The idea in masonry is the bringing together of squared blocks with sharply cut angles. The ideal is articulation and definition of form. For the most part mouldings, the mouldings which architects so liberally deal in, have little meaning beyond expressing the mason's delight in sharply cut forms truly laid. Carving also, except when some story is to be told, for the most part arises from the stone-cutting instinct.

Concrete, on the other hand, is built by continuous aggregation. It is a plastic material, and is unfitted to take sharp edges and delicate forms. We may perhaps conceive of concrete construction as a sort of colossal pottery. All architecture in the past has not been the architecture of cut masonry. In high antiquity, as now in many parts of the world, the current requirements of building were satisfied by erections of clay—first merely put together in the crudest way, and later by a preliminary division into sun-dried bricks. This clay building usually resulted in a type of construction in which the walls were gradually gathered over into coverings in the forms of rough arches and domes, and in which indeed we probably find the historical origin of the vault. The Roman builders carried this method, that is, a highly civilised version of it, forward to great and fine results. The Roman theory of building was to form the walls, vaults, and domes of a sort of built concrete—that is, a rubble of small stones so perfectly drowned in a good cement mortar that it set as a whole. A typical Roman building was thus all of a piece and continuous throughout. The walls and vaults so constructed were afterwards finished by the frank application of skins of other material, as plastering, sheeting with thin marble slabs, and many varieties of mosaic work. Where these methods of decoration have been used there has been a natural tendency to eliminate moulding and carving. In covering the vaults of a Byzantine church, for instance, with mosaic of gold and bright colours this beautiful material was painted as it were over the whole surface of the upper parts of the building from side to side and end to end; it was carried around the edges of arches by rounding the angles, and thus passed over them simply and easily. The Arab builders delighted to case their buildings with brilliantly coloured glazed tiles which covered the wall surfaces and even the domes. And here again is expressed the continuous nature of the body of a structure, which should, I feel, be characteristic of buildings in concrete. Consider again two leading types of furniture, examples of which come daily before our eyes—the joiner's type, which, however elaborate and delicate, depends on articulation of parts, and the highly developed cabinet-maker's art of veneered surfaces. I must point out here, as veneering has become somewhat of a byword and synonym for sham, that this was not at all its origin nor its essential meaning. Its proper office is to cover surfaces with beautifully arranged skins of precious material. There is no reason because we put a carpet over a floor to suppose that its whole substance is carpet, nor need we be distressed because our books are not solid leather. My point about veneered furniture is this—that an entirely different principle of design is brought into play in it than is fitting for what I have called the joiner's type. You may be surprised in examining exquisitely finished satin-wood cabinets in our museums when you notice how simple their general forms are, and that they are almost wholly without mouldings. Thus the methods of structure everywhere modify external forms. That is the point I am trying to make just here. I am not recommending the veneering of concrete, but only pointing out that many types of structure have done without subdivision as much as possible and without mouldings altogether. These are the examples which we might best study so far as we depend on precedent. On the other hand, I think that the method of veneering with thin marble slabs, mosaic, or fine tile work might be frankly adopted occasionally.

I have said enough to show my general idea that concrete structures call for quite a different type of design than ordinary works of stone and brick. Cornices should be mere big rounds or coves, all angles should be rounded, any superadded decoration should be frank veneers and surface applications—platings of marble, bands of gold mosaic, panels of relief sculpture, rough-cast, sgraffito, glazed tiles, and terra-cotta might be appropriate. Big rounded forms seem suggested by this plastic material.

"Beaux-Arts" Courses in Britain.

Referring to Professor Simpson's letter in the last number of the JOURNAL (p. 210) respecting the "Beaux-Arts" Courses announced to be started in London, we quote below for the information of members some particulars of the scheme as given in a recently issued prospectus. The promoters, who are to be known as "The Beaux-Arts Committee to promote improved methods of Architectural Training in Britain," seek to establish in the British Isles ateliers of architecture similar to those connected with the Ecole des Beaux-Arts, Paris. The movement is under the patronage of the French "Société des Architectes diplômés par le Gouvernement," and the Committee of Management is constituted as follows:—

Lord Saye and Sele, Sir George Riddell (*Chairman*), Messrs. Alph. Defrasse (President S.A.D.G.), Jules Godefroi (Vice-President S.A.D.G.), Faure Dujarric (Logiste et Diplômé), Chas. Mewès (Logiste et Diplômé), Arthur Davis, Eug'ne Bourdon (Diplômé), A. Templier (Diplômé), H. V. Lanchester [*F.*], Edwin L. Lutyens [*F.*], A. R. Jemmett [*F.*], E. C. P. Monson [*F.*], Percy B. Tubbs [*F.*], President of the Society of Architects, and R. Goulburn Lovell [*A.*] (*Hon. Secretary*).

The promoters disclaim any intention of supplanting existing educational establishments; their object, they state, is rather to supplement them. The first atelier has been opened in Wells Mews, Wells Street, W., under the direction of Messrs. Charles Mewès and Arthur Davis as Professors (or "Patrons"), and M. Chaurès as "Sous-Patron." To quote the prospectus:

> The atelier will be conducted as far as possible on similar lines to those in Paris, and will enable architectural students in England to receive a like training in the principles of design. As the atelier will devote itself solely to the study of architectural composition, such other knowledge as is necessary to the practising architect must be acquired by the student from the sources already existing for the purpose.

The experiment is an interesting one, and its

progress will be followed with attention by all who are concerned in the training of young men for the profession of architecture in this country.

Safety and Workmanship: Reinforced Concrete Structures.

A note in *The Times* as to the danger to human life arising from lack of knowledge and skill in the construction of aeroplanes has drawn a letter from Mr. Alfred W. S. Cross [*F.*] (*Times* Engineering Supplement, 12th February), pointing out that the caution applies with equal force to other engineering experiments of our day.

For instance (urges Mr. Cross), precautionary measures should be adopted to govern the erection of a ferro-concrete structure the stability of which is dependent not only upon the strength of the skeleton framework and the skill shown in fitting and fixing its component parts, but upon an intimate knowledge of the mechanical properties of the metal reinforcement used.

With this object it is desirable to employ only skilled workmen who have received a sufficiently sound elementary training in structural steelwork to enable them to deal, in a comprehensive spirit, with the small but often important constructional difficulties that occur from time to time during the erection of ferro-concrete buildings of a complex nature. In this connection it is not suggested that the ordinary superintendence of the works by a competent foreman should be discontinued, but rather that no portion of the labour involved should be carried out in accordance with the individual judgment of an untrained man.

Referring to the growing need for the cultivation of conscientious workmanship and a higher standard of technical efficiency among British workers, Mr. Cross says :—

In addition, I would urge the supreme importance of educating the humblest worker in any craft or industry to an extent that will enable him to be interested in the general principles underlying the productive or other work upon which he may be engaged. Briefly, something more than the mere mechanical performance of his ordinary duties is now required from the workman. The general recognition of the science of engineering as a branch of university teaching has been of immense service in the development of specialised or advanced technological education suitable to the needs of professional men. Similarly, the demand for technical training made on behalf of those who aspire to the higher appointments in industrial life has been met by the erection of numerous well-equipped technical schools in all parts of the country. But, on the principle that the strength of a chain is that of its weakest link, it is equally necessary to deal with the varied educational requirements of the working man who may either be living at a remote distance from any teaching centre, or debarred by his lack of general education, from being able to profit by the course of instruction provided at the local technical institute. In either case individual tuition becomes a necessity.

The Admiralty Arch.

The Times announces that an appeal for the immediate completion of the Admiralty Arch has been signed by the editors of most of the London daily newspapers, morning and evening. The signatories state that they have been approached by large numbers of their readers, who are greatly concerned lest the opportunity which now offers of opening up the new Admiralty Arch in a worthy and appropriate manner should be permanently lost. They believe that the loss of this opportunity would be regarded by the people of London, irrespective of party, as a deplorable error. Without suggesting how the present difficulties can be accommodated, they express themselves as satisfied that with good will and determination on the part of the authorities, and a display of civic spirit on the part of the Insurance company concerned, the Arch can be opened out in a manner worthy of the Victoria Memorial, which it completes, and of the site of which it forms a conspicuous feature.

The Owen Jones Student among the Moslems.

Mr. Robert F. Hodges [*A.*], of Craven Park, Harlesden, has kindly sent for publication a letter he has received from Mr. Wm. Harvey, winner of the Owen Jones Studentship this year, thinking the account of his experiences while pursuing his studies in the countries of the Moslem would be interesting to members. Mr. Harvey writes :

You may be interested to hear the history of my drawings. When I went abroad as travelling student from the R.A. Schools, I felt that the usual method of bringing home only fragmentary sketches left a good deal to be desired, so closed with an offer of the Byzantine Research Fund to make careful studies of work that would be useful to them and instructive to me, especially as the buildings they wished surveyed had never been accurately measured before, or, at any rate, proper plans had not been published. Of course, a lot has been written on all three subjects of my Owen Jones drawings (Hagia Sophia, Salonica ; the Church of the Nativity at Bethlehem ; and the Dome of the Rock at Jerusalem), but most former records were hopelessly at sea in detail owing to the immense difficulties involved in drawing in places so populous with fanatics. In Salonica I was once pitched neck and crop down the dark steep stairs of a minaret by an enraged Turk who suspected me of spying ; and in Bethlehem I was shoved head foremost through a big gutter outlet in an abnormally high parapet of the church aisle and obliged to creep down a ladder (luckily not too steep !) in the inverse order of things, with my head facing the ground ! In this case my assailant was a gigantic Greek sacristan who imagined that my measuring operations desecrated the fabric ! Of course, my pockets were crammed full of official permits in both cases, but their value was rather less than nothing ; especially in Bethlehem, for the priests there were in revolt against their Patriarch, who had given me permission to measure. Indeed, in a village near Bethlehem a priest was shot dead on venturing to remark that "the Patriarch isn't a bad sort." His body was brought to the church while I was there at work. Later in my stay the church was captured by storm (though without bloodshed) by peasants in favour of the Patriarch's party, who drove out the Bishop and his priests ! To get to the Dome of the Rock at all, a stranger has to be protected by a soldier, and even then is liable to be shot at sight by wandering beggars ! My work there lasted every day for six months, and many times my papers were seized by wild-looking fellows, and only given back after the old chiefs in charge of the place had spent a long time in argument and entreaty.

Of course, in such a case the victim can do nothing but sit still and look pleasant; and even supposing your soldier is at hand and not asleep, his sympathies would naturally be rather more inclined towards his countryman the saintly beggar than to a mere stranger from whom he only expects a meagre tip.

No one actually laid hands on me there, but one fanatic objected to my hat and removed it for me. (I had kept it on out of politeness after the chiefs had told me they preferred it that way.) Another, with an interest for my spiritual well being, informed me several times in a loud distinct voice that "Allah Wahed!" ("God is One!"), and only went away after I had assured him in Arabic that I entirely agreed with him. In fact, the only element of real discomfort, as it turned out, was in the daily exit, for the little Moslem boys were out of school by then, and improved their aim by shying at me with fragments of rock as I crossed the courtyard. They were decidedly the masters of the situation, for twenty youngsters cannot all be chased at once by a person loaded with rods and blocks and a camera, even if it were the best of policy to irritate the young ragamuffins. There was an element of comfort in the fact that the old chiefs were as much teased as I was. Naughty little boys would peep in at the East door, if it was open, and, seeing the exit clear through the one on the West, would skip in and patter across the Sacred Rock and out again in a twinkling, while the old men were unfolding themselves from a squatting position to get after them.

In a further letter, Mr. Harvey says:—

Yes, it is all Gospel truth, though only half the truth and the most amusing side of it. The other half deals with bad food and drink, excessive heat and cold, dirt, gloom, fatigue, and vermin, tired eyes and tedious diseases.

"The Builder" Editorship.

It is announced that Mr. Arthur Stratton [*F.*] having retired from the editorship of *The Builder*, the appointment has been accepted by Mr. Herbert W. Wills [*F.*]. Mr. Wills has had considerable experience abroad, serving for a time as assistant, first with Mr. Henry Vaughan of Boston, then with Messrs. Bruce Price and McKim, Mead, & White, of New York. He practised for a short time in Vancouver, British Columbia, and held a Government appointment in the Public Works Department of Hong Kong. He started practice in this country in 1892 in Swansea, South Wales, and was subsequently associated in partnership with Mr. John Anderson [*A.*], at 24 Bloomsbury Square, London. In conjunction with Mr. Anderson, Mr. Wills has carried out various important public buildings, many of them won in competition, and he has frequently acted as Assessor.

Carpenters' Hall Lectures, 1913.

These lectures, illustrated by lantern-slides, will be held on the following Thursdays at 8 P.M.:—

Mar. 6.—Rev. Gerald S. Davies: "Old Charterhouse, London."
Mar. 13.—Mr. Henry B. Wheatley, F.S.A.: "Mediæval Guild Life in London."
Mar. 27.—Mr. John B. Thorp: "A Sketch of Old London up to the Great Fire."
Apr. 3.—Sir Whitworth Wallis, F.S.A.: "Sicily—Ancient and Modern."
Apr. 10.—Rev. F. W. Macdonald: "Social Life in England towards the close of the Eighteenth Century."
Apr. 17.—Mr. Augustine Henry, F.L.S.: "The Choice of Trees for Profitable Planting."

Tickets may be had on application to the Clerk of the Company, Carpenters' Hall, London Wall, E.C.

Chinese Sculpture at the Victoria and Albert Museum.

The National Art-Collections Fund has presented to the Victoria and Albert Museum two Chinese marble statues of unusual importance. These are life-size figures of Corean mandarins in ceremonial dress, carrying a casket and a scroll (perhaps for insignia and a patent of nobility), on elaborately carved bases; they appear to have formed part of a series of memorial statues on each side of the road to a tomb in North China, and are probably by a sculptor of the Ming period. They are exhibited in the West Hall, to the left of the main entrance to the Museum.

COMPETITIONS.

Valley, Anglesey, Rural District Competition.
Gwyrfrai Rural District Competition.

The Competitions Committee request Members and Licentiates not to take part in the above competitions until a further announcement is made that the Conditions have been brought into conformity with the Institute "Regulations." The Committee also request competitors to return their copies of the Conditions immediately to the promoters.

MINUTES. VIII.

At the Eighth General Meeting (Ordinary) of the Session 1912-13, held Monday, 17th February 1913, at 8 p.m.—Present: Mr. Alfred W. S. Cross, M.A. Cantab., *Vice-President*, in the Chair; 25 Fellows (including 10 members of the Council), 33 Associates (including 2 members of the Council), 12 Licentiates, and numerous Students and visitors—the Minutes of the Meeting held 3rd February having been already published were taken as read and signed as correct.

Mr. George Hubbard, F.S.A., *Vice-President*, acting for the Hon. Secretary, announced the decease of Robert Falconer Macdonald, elected *Associate* 1889, *Fellow* 1899, and William George Blackmore Lewis, Grissell Medallist 1878, elected *Fellow* 1906.

The following Fellow and Licentiates, attending for the first time since their election, were formally admitted by the Chairman—viz.: Charles Ernest Elcock, *Fellow*; Herbert Samuel Taylor, John Thomas Saunders, Harry Philip Tufnail, *Licentiates*.

Papers on MODERN HOSPITALS having been read by Messrs. A. Saxon Snell [*F.*] and Wm. Milburn, jun. [*A.*], and illustrated by lantern slides, a discussion ensued, and on the motion of Mr. Edwin T. Hall [*F.*], seconded by Dr. P. Boobyer, a vote of thanks was passed to the authors by acclamation.

The proceedings closed at 10.20 p.m.